Kennesaw Depot Area Analysis and Transportation Study



Prepared for
The City Of Kennesaw
and
The Kennesaw Downtown Development Authority
Kennesaw, Georgia





Kennesaw Downtown Development Authority

As of 03/12/2008

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1 Introduction

The Kennesaw Depot Area Analysis and Transportation Study has been prepared for the City of Kennesaw and the Kennesaw Downtown Development Authority to address development of a new regional-sized Library in downtown, cultural and recreational opportunities associated with the new Library, and improvements to the downtown transportation network. The study incorporated the recommendations, goals and policies from previous planning studies in addition to current expressed needs. The recommendations provided in the study are intended to serve as a planning guide to advance projects into design, engineering and construction phases according to a five year implementation schedule. Recommended funding sources have also been provided to assist the planning, coordination and implementation efforts.

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2 Visioning

City of Kennesaw Community Vision

Our shared vision is to be a state-of-the-art, model city in Cobb County and the metro Atlanta region that encourages a collaborative spirit to address and resolve community issues, provides exemplary facilities and services to our residents and businesses, offers unmatched cultural, educational and recreational opportunities, and promotes economic development while preserving our local historic character and small town charm.

(2006 Comprehensive Plan Update, Community Agenda)

KDDA Mission Statement

"Our mission is to create a vibrant downtown, with the assistance of the downtown community, in order to unite and establish viable businesses while maintaining our sense of community and historic heritage."

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3 Purpose and Scope

The Depot Area Analysis and Transportation Study has been developed in conjunction with the initiative to expand the Kennesaw public Library branch and the Museum's archive capacity. The purpose of the study is to identify and integrate proposed site improvements, program elements, and transportation elements into one cohesive plan complete with implementation strategies and potential funding sources. The initiative to build a new Library corresponds with several other downtown projects that, collectively, will anchor the core of the downtown area and support the city's vision to provide exemplary facilities and services and provide unmatched cultural, educational, and recreational opportunities.

The study examines site conditions, programming (how the property will be used-park space, public concerts and events, etc), and provides recommendations for site development and overall plan implementation regarding the new Library, Museum expansion, and associated elements. The study also examines the current downtownarea transportation conditions, how these conditions will impact Library development, and what improvements will be needed. Opinions of Probable Cost for recommended major improvements have been provided that are intended to be used as a guideline to identify needs and assist with securing funding sources until detailed construction drawings and associated cost estimates can be developed.

The program requirements and proposed solutions have been checked against the most recent updates to the Comprehensive Plan, the Recreation Master Plan and the Livable Centers Initiative Plan to insure, to the extent appropriate, that the Depot Area Study recommendations adhere to or closely parallel previous planning recommendations, goals and policies.

4 Study Area Location

The Depot Study Area (Study Area) is an approximately five acre city-owned parcel located in downtown Kennesaw, immediately east of the CSX rail line. The Area is delineated by the CSX rail line to the south and west, Sardis Street and Big Shanty Road to the east, and Cherokee Street to the north. All of the Study Area is located within the boundary of the Central Business District. Most of the Study Area is located within either the Big Shanty or Cherokee Street Historic District. Cultural events, concerts, parades and festivals are hosted year-round by the City within the Study Area. Recent plans for additions such as a new Library and pedestrian underpass provide unique opportunities for the City to enhance and support its developing downtown.

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5 Background

The existing Library on Lewis street was constructed in the late 1960's. In 1989, the Library expanded again increasing the building footprint to approximately 5,000 square feet. As of 2005, more than 263,000 items circulated through this small Library making it the facility with the sixth highest circulation rate in the Cobb County Library System. More than 18,000 users are also registered through the Kennesaw Library. Due to the age, size and utilization of the facility, the City and County have recognized the need for a larger and improved facility to serve the growing needs of Kennesaw and North Cobb County residents.

In addition to the Library's need for additional space, the Museum is also growing and expanding services and exhibits. In need of additional space to store the growing collection of archives, the Museum has sought funding and studied options for expansion. Ultimately, the idea of marrying a larger Library with the Museum archives was conceived. Preliminary discussions between Library, County and City officials revealed a common interest in developing such a facility on the five-acre site.

Merging cultural resources into a central facility that could be located in the heart of downtown is also appealing to the KDDA and the business community. The City is on the brink of tremendous growth and planned development. The downtown area has lacked a distinguishable and identifiable character for many decades. Most businesses have existed and survived, but never truly flourished. Stakeholders and community leaders recognize that the emergence of new development in conjunction with opportunities to establish a thriving cultural center are key pieces to the sustainability of downtown.

Previous studies, most notably the 2003 Livable Centers Initiative Study and the 2006 Comprehensive Plan update, have recommended solutions to address growth and development issues. The introduction of commercial development, in-town living, cultural and entertainment attractions, have been the common themes addressed in these studies. With the introduction of the proposed new Library, the Museum expansion, and new commercial and residential development, new opportunities for the downtown area have arisen.

The project Steering Committee was responsible for identifying the desired program elements for the Study. The Committee was comprised of a diverse group of stakeholders with representatives from all city departments, elected city officials, Cobb County government, the Cobb County Library Committee, the Kennesaw Historic Preservation Commission, the Museum, the Kennesaw Downtown Development Authority (KDDA) and business owners in the CBD. Additional guiding comments were received from several Study Area property owners and Museum staff.

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6 Summary of Study Area Components and Program Elements

The Kennesaw Depot and the Southern Museum of Civil War and Locomotive History (Museum) are unique and defining symbols of Kennesaw. As anchors of the Study Area, these structures are also the primary visual keys of the westbound approach into the Central Business District (CBD). Located within the Big Shanty Historic District and bounded by the CSX rail line, Cherokee Street, Big Shanty Road, and Sardis Street, this area serves as an important public gathering area for special events including festivals, concerts, Civil War re-enactments, cultural tours and educational events. Understanding the dynamics of each of these programmed events and their relationship to current and proposed site components is critical to this study.

In addition to the programs and festivals associated with the historic Depot and the Museum, is the proposed new regional-sized Library which is a major factor in this study. The Library is expected to be 15,000 square feet with an additional 5,000 square feet for Museum archive space. Other key factors relevant to this study are the numerous mixed-use developments in the downtown area, a planned pedestrian underpass for the CSX rail line south of the Depot, and the need for a second railroad overpass along the northern end of the CBD.

Several CBD-area mixed-use developments have been approved and are nearing the construction phase. These developments are expected to inject a level of business and residential vitality into the CBD that is unprecedented for Kennesaw. The new pedestrian underpass is scheduled to begin construction in 2008. This facility will allow for safe pedestrian passage from one side of the rail line to the other. Currently, pedestrians must cross the rail line at the Cherokee Street at-grade crossing which lacks pedestrian-friendly accessibility.

Finally, for many years the concept of extending Sardis Street north and west behind the Museum and over the rail line has been discussed. Due to the increasing number of CBD development projects, growing regional population and the resulting traffic conditions in the CBD, this concept has gained traction. Detailed recommendations for a new railroad overpass are included primarily within the transportation portion of this study. Consideration of this road extension has also been incorporated into the Depot Study Area concept plan as it directly affects commercial and residential accessibility as well as vehicular and pedestrian mobility in relation to the Study Area program elements.

Through discussions with stakeholders and the committee the following project requirements, components and program elements were established. Tables 1, 2 and 3 present existing and proposed components of the Study Area, the Museum, and the Transportation network. The project components are the physical elements to be incorporated into the Study Area plan. Table 4 presents existing and proposed program elements which determine how the site and its components will be utilized. The project programming has provided the framework for the planning process to

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produce a cohesive solution for the Study Area as described in the Concept Illustration plan and diagrams of Transportation Alternatives.

Table 1: Existing Depot Area Inventory and Proposed Components

| | The Depot Area | | | | | | | |
|---|---|--|--|--|--|--|--|--|
| Existing Depot Area Inventory | Description | | | | | | | |
| The Depot Building | Site of the Historic Preservation Commission/ Museum, staging area for events, concerts, and festivals, train viewing | | | | | | | |
| Parking Lot | (30)-automobile spaces (4)- bus spaces | | | | | | | |
| Community House and Garages with picnic table | The House was previously used by the Parks and Recreation Department for classes. Currently, the building is structurally unsafe and closed to public use. The two garages are used for pottery and arts classes. | | | | | | | |
| Playground | One piece of equipment for ages 5-12 occupies a space approximately 30ft x 40ft. | | | | | | | |
| Greenspace | One wide, linear space parallel to the raillines is used for festivals, events, concerts and movies. A second greenspace (field) at Big Shanty Road and Sardis Street is typically used for event parking. | | | | | | | |
| Walking Trail | Approximately 1200 feet of looping trail along the border of the linear greenspace south of the Depot. | | | | | | | |
| Proposed Depot Area Components | Description | | | | | | | |
| Regional Library | 15,000 square feet plus an additional 5,000 square feet for Museum archive storage. One story or two story with potential for the second story to be used by the Museum, police or as public meeting space/ conference rooms. Funding to be procured. | | | | | | | |
| Museum Archive Space | 5,000 square feet to be part of Library development. Funding procured. | | | | | | | |
| Public Park | Develop a real "Central Park" or plaza | | | | | | | |
| Fountain(s) | One or more fountains/ water feature | | | | | | | |
| Amphitheater | Use for concerts, movies, plays, dance, etc. Requires large capacity for public events. | | | | | | | |
| Children's Garden and Playground | Specially designed and fenced areas associated to Library and park | | | | | | | |
| Picnic Areas | Picnic tables and lawn areas in various areas. | | | | | | | |
| Train Viewing Platform | Railroad overlook area adjacent to The Depot building, incorporated with the Lacy Hotel replia. | | | | | | | |
| Visitors Center | Space for two staff members, displays and storage. | | | | | | | |
| Space for Public Gatherings | Green or Open Space for public events such as festivals, movie nights and concerts. | | | | | | | |
| Public Restrooms | Size according to daily use- not special event use. | | | | | | | |
| Lacy Hotel | Develop a Replica of the pre-civil war era structure | | | | | | | |
| Snack/ Coffee Shop | Possibly co-located with the Library. | | | | | | | |
| Underground Utilities | Relocate overhead utility cables for phone, cable and power underground with new development. | | | | | | | |

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Table 2: Existing Museum Inventory and Proposed Components

| Table 2. Existing Moscotti | Table 2. Existing Moseon inventory and Proposed Components | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| | The Museum | | | | | | | |
| Existing Museum Inventory | Description | | | | | | | |
| Southern Museum of Civil War and Locomotive History Museum. | The Museum houses multiple civil war and locomotive exhibits including "The General". Many events and special exhibits are hosted continuously. A theater, gift shop and administration offices are also located here. | | | | | | | |
| Museum Greenspace | Greenspace in front of the Museum is often used for civil war camp demonstrations and special events when Cherokee Street is closed between Big Shanty Road and Main Street. | | | | | | | |
| Parking (2) | Front lot contains (7) parking spaces. Rear Lot contains (78) parking spaces and (4) bus spaces | | | | | | | |
| Proposed Museum Components | Description | | | | | | | |
| Preservation Village | Space for period demonstrations, displays, re-enactments. | | | | | | | |
| Space for special events | Provide areas for special events such as: - "Folk Tales of the Rails" - "So You Wanna Be A Civil War Soldier" - "So You Wanna Be An Engineer" - All Aboard Days - Artillery Weekends (Not limited to Civil War Era) - "Shakespeare In The Park" - Living History Programs | | | | | | | |
| Area for Storytelling | Folk-telling activities occur in the southern-most tip of the park property | | | | | | | |
| Space for Civil War Re- enactments and encampments | A large and open area is required for demonstrations such as cannon firings | | | | | | | |
| Conference/ Meeting Rooms | Incorporate within Library or Lacy Hotel Replica | | | | | | | |
| Continuing Education Classes (single or series) | Incorporate within Library or Lacy Hotel Replica | | | | | | | |
| Additional Museum Space (Archive space) | 5,000 square feet requested for inclusion in the new Library | | | | | | | |
| Area for Group Lunches | Picnic tables or pavilions located in greenspace areas | | | | | | | |

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Table 3: Existing Transportation Area Inventory and Proposed Components

| | Table 3: Existing Transportation Area Inventory and Proposed Components Transportation Components in the Study Area | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| Existing Transportation | | | | | | | | |
| Inventory | Description | | | | | | | |
| Cherokee Street | 2 lanes. Major carrier of traffic to/ from I-75 and Cobb Parkway. Limited space for RO.W. | | | | | | | |
| Cherokee sheer | expansion. Severe Congestion during peak hours at Big Shanty Road intersection and the at- | | | | | | | |
| | grade crossing. Separates Museum from Depot. | | | | | | | |
| Big Shanty Road | 2 lanes. Well-used North-South route between Cherokee Street and McCollum Parkway. | | | | | | | |
| big sharily Roda | Important route to access Study Area. | | | | | | | |
| Sardis Street | 2 lanes. Well-used connector route between Cherokee Street/ Big Shanty Road and South Main | | | | | | | |
| sarais sireer | | | | | | | | |
| | Street. Used to avoid at grade crossing particular when trains pass through town. Important route to access Study Area. Extension to Moon Station Road needed. | | | | | | | |
| Shirley Drive | Narrow 2 Iane road segment between Carruth Street and Cherokee Street that provides access | | | | | | | |
| Stilley Drive | to the Museum and the Wedding Chapel. Irregular intersection geometry at Cherokee Street. | | | | | | | |
| Main Street | Primary North-South Route through the downtown area. | | | | | | | |
| Moon Station Road | 2 lanes. Primary North-South Route between the downtown and northern suburbs. Important | | | | | | | |
| MOOIT STUITOTT ROUG | intersection at Main Street. Moon Station Road will be impacted by Sardis Street Extension | | | | | | | |
| Whitfield Place | 2 lanes. Narrow R.O.W. Provides alternative access to Main Street. This road will be impacted | | | | | | | |
| Willield Flace | by the Sardis Street Extension. | | | | | | | |
| Public Parking | Public parking exists along Main Street, Watts, Drive, Lewis Street, at the corner of Main Street | | | | | | | |
| 1 oblic i diking | and Moon Station Road, at the Museum, the Depot, City Hall, Trackside Grill Restaurant and | | | | | | | |
| | Adams Park. Shared parking is likely in many of the new developments. Parking is primarily a | | | | | | | |
| | concern during special events. | | | | | | | |
| CSX Railroad | Two lines running North-South bisect he downtown area and from the western boundary of the | | | | | | | |
| C3X Kallioda | Study Area. On average 60 trains per day will utilize this section of track. The at-grade crossing at | | | | | | | |
| | Cherokee Street creates a bottleneck for automobiles during high peak times and safety | | | | | | | |
| | concerns for pedestrians during special events. A second overpass is needed and proposed as | | | | | | | |
| | part of the Sardis Street Extension. | | | | | | | |
| | pair of the datas office. Extension: | | | | | | | |
| | Two 900 foot long sidings are located between the main lines and the Study Area. CSX uses the | | | | | | | |
| | sidings to park maintenance equipment and occasionally rail cars. Access to the sidings are | | | | | | | |
| | achieved via an easement at the southern end of the Depot parking lot. CSX will store supplies | | | | | | | |
| | and debris on the ground on this easement and in their ROW. The City and CSX are discussing | | | | | | | |
| | the possibility of relocating the sidings to a point further south and out of the downtown area. | | | | | | | |
| | | | | | | | | |
| CSX Railroad Overpass | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. | | | | | | | |
| · | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. | | | | | | | |
| Proposed Transportation | | | | | | | | |
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| Proposed Transportation Components Second CSX Overpass- | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. Description Locate a new overpass on the Northern end of the CBD behind the Museum. | | | | | | | |
| Proposed Transportation Components Second CSX Overpass- Public Parking | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. | | | | | | | |
| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. Description Locate a new overpass on the Northern end of the CBD behind the Museum. | | | | | | | |
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| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. | | | | | | | |
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| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street Parking for Buses | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. Additional bus parking needed for Museum and potentially the new Library. | | | | | | | |
| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street Parking for Buses Plan for Cherokee Street At- | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. | | | | | | | |
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| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street Parking for Buses Plan for Cherokee Street At- | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. Additional bus parking needed for Museum and potentially the new Library. Improve safety and efficiency- eliminate the peak hour and train crossing bottleneck. Intersection improvements at Cherokee Street and Big Shanty Road, Sardis Street at Main Street, | | | | | | | |
| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street Parking for Buses Plan for Cherokee Street Atgrade Crossing | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. Additional bus parking needed for Museum and potentially the new Library. Improve safety and efficiency- eliminate the peak hour and train crossing bottleneck. Intersection improvements at Cherokee Street and Big Shanty Road, Sardis Street at Main Street, Moon Station and Main Street, Cherokee Street at-grade crossing, second CSX overpass, Sardis | | | | | | | |
| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street Parking for Buses Plan for Cherokee Street Atgrade Crossing Eliminate Bottlenecks | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. Additional bus parking needed for Museum and potentially the new Library. Improve safety and efficiency- eliminate the peak hour and train crossing bottleneck. Intersection improvements at Cherokee Street and Big Shanty Road, Sardis Street at Main Street, Moon Station and Main Street, Cherokee Street at-grade crossing, second CSX overpass, Sardis Street Extension | | | | | | | |
| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street Parking for Buses Plan for Cherokee Street Atgrade Crossing | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. Additional bus parking needed for Museum and potentially the new Library. Improve safety and efficiency- eliminate the peak hour and train crossing bottleneck. Intersection improvements at Cherokee Street and Big Shanty Road, Sardis Street at Main Street, Moon Station and Main Street, Cherokee Street at-grade crossing, second CSX overpass, Sardis | | | | | | | |
| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street Parking for Buses Plan for Cherokee Street Atgrade Crossing Eliminate Bottlenecks Re-establish a grid system network of streets | Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. Additional bus parking needed for Museum and potentially the new Library. Improve safety and efficiency- eliminate the peak hour and train crossing bottleneck. Intersection improvements at Cherokee Street and Big Shanty Road, Sardis Street at Main Street, Moon Station and Main Street, Cherokee Street at-grade crossing, second CSX overpass, Sardis Street Extension Apply to the downtown area west of the rail line from Main Street to Watts Drive. | | | | | | | |
| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street Parking for Buses Plan for Cherokee Street Atgrade Crossing Eliminate Bottlenecks Re-establish a grid system network of streets Facilitate and Support New | Two lane overpass is located on South Main Street 250ft. north of the Sardis Street intersection. Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. Additional bus parking needed for Museum and potentially the new Library. Improve safety and efficiency- eliminate the peak hour and train crossing bottleneck. Intersection improvements at Cherokee Street and Big Shanty Road, Sardis Street at Main Street, Moon Station and Main Street, Cherokee Street at-grade crossing, second CSX overpass, Sardis Street Extension | | | | | | | |
| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street Parking for Buses Plan for Cherokee Street Atgrade Crossing Eliminate Bottlenecks Re-establish a grid system network of streets Facilitate and Support New Development | Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. Additional bus parking needed for Museum and potentially the new Library. Improve safety and efficiency- eliminate the peak hour and train crossing bottleneck. Intersection improvements at Cherokee Street and Big Shanty Road, Sardis Street at Main Street, Moon Station and Main Street, Cherokee Street at-grade crossing, second CSX overpass, Sardis Street Extension Apply to the downtown area west of the rail line from Main Street to Watts Drive. Provide safe access and route alternatives, improve visibility and pedestrian access/facilities | | | | | | | |
| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street Parking for Buses Plan for Cherokee Street Atgrade Crossing Eliminate Bottlenecks Re-establish a grid system network of streets Facilitate and Support New | Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. Additional bus parking needed for Museum and potentially the new Library. Improve safety and efficiency- eliminate the peak hour and train crossing bottleneck. Intersection improvements at Cherokee Street and Big Shanty Road, Sardis Street at Main Street, Moon Station and Main Street, Cherokee Street at-grade crossing, second CSX overpass, Sardis Street Extension Apply to the downtown area west of the rail line from Main Street to Watts Drive. Provide safe access and route alternatives, improve visibility and pedestrian access/facilities Improve flow on Main Street, Cherokee Street, Moon Station Road, Dallas Street, and Watts | | | | | | | |
| Proposed Transportation Components Second CSX Overpass- Public Parking Improvement of Pedestrian Safety on Cherokee Street Parking for Buses Plan for Cherokee Street Atgrade Crossing Eliminate Bottlenecks Re-establish a grid system network of streets Facilitate and Support New Development Improve North-South | Description Locate a new overpass on the Northern end of the CBD behind the Museum. Needed for the Library, Museum and general public use. Traffic Calming, wider sidewalks, wider buffers, improved crosswalks. Additional bus parking needed for Museum and potentially the new Library. Improve safety and efficiency- eliminate the peak hour and train crossing bottleneck. Intersection improvements at Cherokee Street and Big Shanty Road, Sardis Street at Main Street, Moon Station and Main Street, Cherokee Street at-grade crossing, second CSX overpass, Sardis Street Extension Apply to the downtown area west of the rail line from Main Street to Watts Drive. Provide safe access and route alternatives, improve visibility and pedestrian access/facilities | | | | | | | |

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Table 4: Programs and Events for the Study Area

| Table 4: Programs and Events for the Study Study Area Pro | | |
|---|--------------------|-------------------------|
| Program Components | Currently in Place | Proposed (or Continued) |
| Fairy Time Favorites | Х | Х |
| Queen of Hearts Valentine's Exchange | Х | X |
| Theater Performances | Х | X |
| Touch a Truck | X | X |
| Kennesaw Spring Fling(Egg Hunt) | X | X* |
| The Frog Prince's Spring Splash | Х | X |
| Big Shanty Festival | X | X |
| Summer Concerts | Х | X |
| Movie Under the Stars | Х | X |
| City -Wide Picnic | X | X |
| July 4th Fireworks | X | X |
| Taste of Kennesaw | X | X |
| Incredible Pumpkin Trail | Х | X |
| Lighting of the City Christmas Tree | X | X |
| Christmas Parade | X | X |
| Farmers Market (Saturday mornings in Summer) | X | X |
| Pigs and Peaches BBQ Competition | X | |
| Tigo and Foderior Bod Composition | | |
| Shakespeare In The Park | | X |
| | | |
| The Museum Prog | rams and Events | |
| Folk Tales of the Rails | X | X |
| So You Wanna Be A Civil War Soldier | X | X |
| So You Wanna Be An Engineer | X | X |
| All Aboard Days | X | X |
| Mommy and Me | X | X |
| Games for Learning Program Series | X | X |
| Children's History Workshop | X | X |
| Kreative Kids Program Series | X | X |
| Share a Story Program Series | X | X |
| Night at the Southern Museum | X | X |
| Haunted Museum | X | X |
| Artilley Weekends (Not limited to Civil War Era) | X | X |
| Storytelling | X | X |
| ororyroming | ^ | ^ |
| Civil War Re-enactment | | X |
| Civil War Encampment | Х | X |
| Period demonstrations, displays and re-enactments. | | X |
| Children's Garden | | X |
| | | |
| Transportation Impacts | of Programs and Fy | vents |
| Cherokee Street Closure for special events | X | X |
| Main Street closure for special events | X | X |

^{*} Event may be moved to Swift-Cantrell Park

Refer to Tables 11 and 12 in Appendix B for a recommendations for associating programs and events to the project components. These tables also present options as to how the various site components may be utilized for the term. As the need for alternatives or additional programs is realized, the manner in which the site is utilized is subject to change.

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7 Existing Conditions and Analysis of Opportunities and Constraints

After documenting the existing and proposed site components and establishing the anticipated program elements, an analysis of existing conditions was performed to identify and evaluate opportunities and constraints that might affect the various components of the Study Area. Analysis was performed to address land use, environmental conditions, utilities, historic structures, known adjacent developments, the CSX pedestrian underpass, and the transportation network.

Refer to Appendix B for maps associated with Existing Conditions and Analysis.

7.1 Land Use and Zoning

Located immediately to the north of the Study Area is the Museum. A small cluster of four historic structures is located southeast of the Museum and adjacent to Cherokee Street and Shirley Drive. These structures, originally residences, have been converted into commercial offices. To the East and North of the Museum, along Cherokee Street, is a mix of residential and commercial land uses. The commercial land uses are limited to properties fronting Cherokee Street. Many businesses operate out of converted houses. Many of the houses north and east of the Area (along Cherokee Street, Big Shanty Road, and Sardis Street) are part of older neighborhoods within walking distance of the Study Area.

West of the Study Area and across the rail line is the core of the CBD with a mix of commercial and institutional land uses. Most of the commercial activity is retail in nature with professional office uses scattered throughout the CBD. Kennesaw City Hall and the current Library are located in this area. Institutional land uses such as schools and churches are also located within the adjacent neighborhoods and CBD area.

The Study Area is centrally located within the "Downtown Activity Center" district on the Future Land Use Map and the "Historic CBD" area on the Character Area Map. Immediately to the east of the Study Area is a Low/ Medium Residential district. The Neighborhood Activity Center district located immediately to the northeast encompasses the Cherokee Street Corridor. The Depot Area is zoned Central Business District which permits all uses proposed in this study.

Refer to Figures 2, 3, and 5 in Appendix A for additional Land Use, Future Development and Zoning information.

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7.2 Topography

The Study Area property is relatively flat with some gentle slopes (under 10 percent) near the southernmost fringes of the area. A well-defined drainage swale is centrally located and carries stormwater and, at times, ground water southwest towards the southern boundary of the Area. At the time of publishing, the topographic conditions to be created by the construction of the pedestrian underpass are not fully determined. It is known that retaining walls will be required to allow the walkway to pass 18 feet under the rail lines, however the impact to the existing site topography is expected to be minimal.

Refer to Figure 7 in Appendix A.

7.3 Historic Districts and Structures

The Study Area is located within the Big Shanty and Cherokee Street Historic Districts. Located on site are two historic structures, the Depot (circa 1908) and the Community House (B.H. Carrie House, circa 1890). The Depot serves as the focal point and stage for most of the events currently held downtown. The Kennesaw HPC maintains a small Museum and archives in part of the Depot. The Community House is maintained by the Parks and Recreation Department, but is no longer actively used. Two garages located behind the community house are used for City sponsored arts and craft classes. The garage structures are not of historic significance.

At the northeast corner of Cherokee Street and Big Shanty Road is the current Lewis House (formerly the G.T. Carrie House, circa 1870). This house should not be directly impacted by future development in the Study Area, however, due to its close proximity, this structure will influence the location and type of development immediately adjacent to the property.

One structure, currently serving as the wedding Chapel office, will be affected by the Sardis Street Extension. In order to limit disturbance of several historic homes and the historic district, shifting this structure to the west will permit the Extension to pass just east and preserve the structure on the adjacent parcel. Three historic homes located at the intersection of Moon Station Road and Whitfield Place may also be affected. The Sardis Street Extension/railroad overpass is expected to pass very near these structures. The structures located north of the Extension at Moon Station Road will need to be shifted slightly north from their current location to accommodate the Right of Way requirements and to protect the integrity of the structure and historic district.

The Study Area is located within the oversight boundaries of the Kennesaw Downtown Development Authority (KDDA) and the Historic Preservation Commission. These organizations will assist the City in determining appropriate actions required by new development and the Sardis Street Extension. Specific development guidelines have been established for the City's historic districts. All new development must follow the guidelines specified in the Historic Design Review Guidelines adopted February 5, 2007.

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the City-wide Architectural guidelines (not yet adopted) may also be applied to new development in the Study Area.

Refer to Figures 4 and 6 in Appendix A.

7.4 Wetland Delineation and Hydrology Assessment

A precursory wetland and hydrology assessment was performed in August 2007 for the Area. The assessment specifically addressed the existing swale centrally located on the property. Discussions with City staff and a local property owner revealed that this swale and the grassy field just north of the swale were once part of a wetland area that had been filled-in two or more decades ago. It is believed that at least one spring head exists in this general location. However, due to the existing extreme drought conditions, visual confirmation of the specific location is unattainable at this time.

The assessment did note that an area of wetland vegetation exists at the southernmost point of the swale. Much of this area is located on the city-owned property, however some of the wetland vegetation is also located on the Clarke Property. The soils in this area, Urban land-Cecil complex and Urban land-Madison complex, are classified as non-hydric. However, City staff investigations have revealed the presence of hydric soils in the southernmost leg of the swale.

Based on the previous findings and recommendations of City staff, it is advised that all development be required to maintain the State's minimum 25 foot protective buffer as this streambed will be labeled as "intermittent" and subject to the laws protecting Jurisdictional Waters. In Kennesaw, development is subject to local stream buffer requirements in addition to State requirements. A variance may be needed from the City's requirements to reduce or waive the 50 foot stream buffer imposed by the City. The need for or degree of variance will depend upon the type of development proposed.

In addition to the wetland assessment, a more thorough understanding of the hydrology of the Study Area is required. The wetland vegetation and hydric soils on the site are located within the lowest point of a 25 acre watershed. The watershed area includes the Cherokee Street R.O.W. from the Depot to Cherokee Ridge Trail, the western half of the Fullers Chase Development to Big Shanty Road and all of the area between Sardis Street and the rail lines. Most of the stormwater that runs down Cherokee Street enters the site via a swale beside the Community House. Several curb inlets are located on Cherokee Street near the Museum and on Big Shanty Road near Sardis Street. Stormwater from these inlets is piped directly to the swale located 300 feet south of the Depot Parking Lot. A single, 30 inch diameter pipe under the rail lines provides the only drainage for this watershed.

Refer to Figures 7, 8 and 10 in Appendix A.

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7.5 Soils

As referenced in the Wetland Delineation and Hydrology Assessment section, the primary soils of the Study Area are Urban land-Cecil complex (UfC) and Urban land-Madison complex (UhC). Each of these soils are classified as non-hydric and occur on 2 to 10 percent slopes.

One location that deserves special attention is the grassy field at Big Shanty Road and Sardis Street. This area is known to contain large quantities of fill material. It is unknown what type of fill material was added, what foreign objects were contained in the fill, or what objects were buried under the fill. Soil tests are needed to determine how structures should be constructed in this location.

Refer to Figure 8.

7.6 Vegetation

In general, the Study Area is very open with limited amounts of tree and shrub vegetation. There are several tree groupings and significant tree species which are noted below. Along the streambed that was discussed previously, there are several medium size trees that are typically found in a wetland environment. Several large oak and pecan trees are located west of the Community House. Between the Depot parking lot and the southern boundary of the Study Area lies a dense grouping of Mulberry trees. This stand of trees provides a buffer between the CSX Right-of-Way and city owned property, but generally provides little landscape value.

The most significantly vegetated area is the southernmost tip of the Study Area near the CSX rail line, in which the hint of a southern piedmont Oak-Hickory forest is present. Several majestic oak trees over 50 feet in height are present. There are few under-story trees, creating an ideal location for outdoor events under the high tree canopy. This area is often used for civil war encampments and exhibitions.

The events parking field located at the corner of Big Shanty Road and Sardis Street is a grass field that is periodically mowed. The grassy area located south of the Depot parking lot is maintained more often due to the public events held in this area. A mix of grasses is present in each location. Also, along the fringes of the Depot parking lot and the Depot building, the City has recently planted trees of approximately 3 inches in diameter and 12 feet in height. These trees should be inventoried and relocated as needed to accommodate new development in the Study Area.

To the north/ northeast of this Study Area, there are significant stands of tall oak, hickory and pecan trees that will be impacted by the proposed Sardis Street Extension. Information regarding documented tree species in the Study Area is included in Table 5.

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Table 5: Trees Commonly Found in the Study Area

| Botanical Name | Common Name | Botanical Name | Common Name |
|------------------------|-------------------|---------------------|------------------|
| Carya illinoinesis | Pecan | Quercus coccinea | Scarlet Oak |
| Carya tomentosa | Mockernut Hickory | Quercus falcata | Southern Red Oak |
| Cornus floridus | Flowering Dogwood | Quercus nigra | Water Oak |
| llex opaca | American Holly | Quercus marilandica | Black Jack Oak |
| Juniperus virginiana | Eastern Red Cedar | Quercus phellos | Willow Oak |
| Liriodendron tulipfera | Tulip Poplar | Quercus stellata | Post Oak |
| Morus alba | White Mulberry | Robinia hispada | Spiny Locust |
| Pinus taeda | Loblolly Pine | Salix nigra | Black Willow |
| Platanus occidentalis | Sycamore | Sassafras albidum | Sassafras |

Source: MACTEC Visual Survey

Refer to Figure 11.

7.7 Utilities

Utilities in the Study Area include power, telephone, cable, natural gas, water, sanitary sewer and stormwater sewer. Two maps present existing facilities for utilities- Figure 9 and Figure 10. Figure 9 shows "Overhead Utilities" and Figure 10 shows "Underground Utilities." The "Underground Utilities" map data showing the location of the water, sanitary sewer and fire hydrants was obtained from the Cobb County Water Authority and may be found in Appendix A. This map also includes the probable location for the natural gas distribution line and stormwater sewer pipes in or adjacent to the Study Area.

The "Overhead Utilities" map illustrates the location of overhead Power, Cable and Telephone lines. Their location was determined by a visual survey. The type, quantity and length of lines that may be buried underground are unknown. It is presumed that there are underground cables as determined by the placement of several equipment hubs without tie-ins to aboveground poles or cables.

Concurrent with all new development in the Study Area, all overhead utilities should be relocated underground where feasible. Additional coordination with utility companies is required for cost-estimating and the implementation of any of the proposed project elements. For the purpose of this study, one natural gas distribution line is presumed buried on one side of every street. The linear footage of all utility lines, the field-surveyed quantity of equipment cabinets and underground vaults likely impacted by the proposed development in the Study Area are summarized in Tables 6 and 7 below.

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Table 6: Summary of Overhead Utilities Likely Impacted by Study Area Development

| Table 6. Somman | ny or overneda diffines likely impacted by stody Area bevelopment | | | | | | | | |
|--|---|--------------|--|--|---|--|--|---|--|
| | | Power | | | Telephone | | | Cable | |
| Location | Length of Road- way (ft) | No. of Poles | Length of Lines above ground (ft) | No. of Equip- ment Cabinet Locations | Length of Lines Above Ground (ft) | No. of Equip- ment Cabinet Locations | No. of Under- ground Vault Locations | Length of Lines Above Ground (ft) | No. of Equip- ment Cabinet Locations |
| Sardis Street (Existing) | 850 | 8 | 890 | 0 | 850 | 2 | 0 | 850 | 0 |
| Sardis Street Extension | 1450 | 5 | NA | 0 | 1450 | 5 | 0 | 1450 | 0 |
| New Cherokee Street (Proposed) | 1550 | NA | NA | NA | 1550 | 0 | 0 | 1550 | 0 |
| Shirley Drive (Modified) | 600 | 7 | 1600 | 0 | 600 | 0 | 0 | 600 | 0 |
| Big Shanty Road (To be Closed) | 420 | 5 | 400 | 0 | 420 | 0 | 0 | 420 | 0 |
| Big Shanty Road (To be Modified) | 350 | 5 | 640 | 0 | 350 | 0 | 0 | 350 | 0 |
| Cherokee Street At- Grade Crossing to Sardis Street Extension intersection | 900 | 8 | 1200 | 0 | 900 | 0 | 2* | 900 | 0 |
| Whitfield Place | 300 | 4 | 300 | 0 | 300 | 0 | 0 | 300 | 0 |

Source: City of Kennesaw, Cobb County Water Authority, MACTEC visual Survey

Table 7: Summary of Underground Utilities Likely Impacted by Study Area Development

| Table 7. Sommary of Shaery | | | Water and Sewage | | | | |
|---|--------------------------------|---|---|--|------------------------------|---------------------------|--|
| Location | Length of Road- way (ft) | Length of Water Supply Pipe (ft) | Length of Sanitary Sewer Pipe (ft) | Length of Storm- water Sewer Pipe (ft) | No. of Fire Hy- drants | Length of Pipe (ft) | |
| Sardis Street (Existing) | 850 | 890 | 770 | 0 | 1 | 850 | |
| Sardis Street Extension | 1450 | 160 | 100 | 0 | 1 | 1450 | |
| New Cherokee Street | | | | | | | |
| (Proposed) | 1550 | NA | NA | 0 | NA | 1550 | |
| Shirley Drive (Modified) | 600 | 720 | 50 | 0 | 1 | 600 | |
| Big Shanty Road (To be Closed) | 420 | 400 | 100 | 40 | 0 | 420 | |
| Big Shanty Road (To be Modified) | 350 | 350 | 440 | 0 | 0 | 350 | |
| Cherokee Street At-Grade Crossing to Sardis Street Extension intersection | 900 | 900 | 0 | 40 | 2 | 900 | |
| Whitfield Place | 300 | 300 | 300 | 0 | 2 | 300 | |

Source: City of Kennesaw, Cobb County Water Authority, MACTEC visual Survey

^{*} Located in the Cherokee Street sidewalk between the Museum and Shirley Drive.

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8 Current Transportation Projects in the Depot Study Area

There are several key transportation elements that impact the Study Area, most of which are highlighted in Section 11 and Tables 10 and 24-32. One of the more important impacts on the Study Area is the proposed extension of Sardis Street from the current intersection at Big Shanty Road north to Cherokee Street and eventually north of the Museum and across the CSX rail lines to Moon Station Road and Main Street. The purpose for extending Sardis Street is to create alternative transportation routes and to provide an additional railroad overpass to relieve the congestion that frequently occurs at the Cherokee Street at-grade crossing and at various intersections along Main Street. This proposed Sardis Street Extension has been suggested in previous downtown studies, but has not moved into the implementation process. Extensive regional growth and expected downtown development projects are the catalysts for now giving serious consideration to this roadway extension.

The adjacent surface streets place indirect influences on the Depot Study Area. Important thoroughfares of the area are Cherokee Street, Big Shanty Road, and Main Street. Cherokee Street provides east-west access from the CBD to I-75. Main Street, also known as Old Highway 41, provides north-south access through the CBD on the west side of the rail line. Main Street is a heavily used route for commuters traveling between Acworth and Marietta. Big Shanty Road provides north-south access from the CBD to Chastain Road on the east side of the rail line.

In addition to the Sardis Street Extension and other roadway improvements, attention must be given to developing and improving pedestrian facilities such as sidewalks, crossings, and buffers along all road right-of-ways affecting the Study Area. Some roads, such as Sardis Street, currently have no sidewalks or pedestrian paths. A sidewalk, funded by LCI, is planned along the west side of Sardis Street and should be coordinated with the recommendations of this Study. Other roads have very narrow sidewalks or sidewalks in disrepair. This is the case along portions of Cherokee Street. Cherokee Street also includes a 12 inch wide grass strip between the sidewalk and the road in some locations. Where possible, wider grass or landscape buffers should be included as roads are constructed or enhanced.

8.1 Downtown Development Projects

At the times when previous studies and master plan initiatives were conducted, the momentum was insufficient to carry many of the recommended initiatives to implementation. Driven by new development in the downtown area, regional population growth and market demands, the momentum to forge ahead is now much more established. Recently, downtown Kennesaw has entered into a renaissance period of redevelopment with several active redevelopment projects. The construction of the Southern Museum of Civil War and Locomotive History and Educational Center and the addition to and refurbishment of City Hall are catalysts to this downtown

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redevelopment. The former Hill Store building, currently owned by the Eaton Family and located at the corner of JO Stephenson Avenue and Main Street, was one of the first commercial structures to undergo a facelift. Extensive sidewalk and pedestrian crosswalk improvements have also been implemented, enhancing the look and function of downtown streets.

Currently, four mixed-use developments have been approved in the downtown area that will likely be constructed in the short term and are expected to have a significant influence on the Study Area. The currently approved development projects are listed in Table 8:

Table 8: Approved Downtown Development Projects

| Project Name | Location | Description | Total Estimated Value (\$ Million) |
|-----------------------|--|--|---|
| Fuller's Chase | Cherokee Street to near Big Shanty Road | Phase I: Restored Historic and New Structures for professional office and residential use. Phase II: 28 town homes, up to 3,000 square feet. Price points begin in the low \$300,000's. | \$10-\$12 |
| French Colony | Corner of Sardis Street and South Main Street | Multiple three story residential buildings with structured parking under the buildings. Approximately 150 town homes with 1, 2, and 3 bedrooms, starting near 1,100 square feet. Price points begin in the low \$200,000's. | \$35-\$40 |
| Madison Retail | Watts Drive at Main Street | Directly across from the CSX pedestrian underpass, includes 30,000 square feet of Retail space, 25 Condominiums, 70 town homes, a 3 acre park, and a 400 space public/ private parking deck. Residential units will average 2,000 square feet. Price points begin in the high \$200,000's. | \$35 |
| Ultima Development | Dallas Street at JO Stephenson Avenue and Lewis Street | 20,000 square feet of Retail and Office space, 40 residential loft style units in 1,2 and 3 bedroom arrangements. Units start at 800 square feet. Price points begin in the high \$100,000's. | \$35 |

Source: City of Kennesaw

8.2 Pedestrian Underpass

A critical transportation and public safety component to downtown development is the need for improved pedestrian access across one of the busiest sections of CSX rail line in the country. On average, approximately 60 trains per day utilize this section of rail. The north-south oriented rail line divides the City. Generally, retail and institutional uses are located west of the rail line and the institutional, office and residential land uses are located east of the rail line. In addition, the majority of special event and public parking is spread over several areas west of the rail line in or near the CBD.

Currently, pedestrians are forced to cross the rail line at the Cherokee Street at-grade crossing without a continuous sidewalk or adequate separation from vehicular traffic. The segment of Cherokee Street between Main Street and Big Shanty Road is often closed during major events, but remains open for small events and day-to-day operations. This perpetuates safety concerns for pedestrians who are on a casual stroll or those who have parked in the CBD and are trying to reach the Museum or Depot without having to drive across the tracks.

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To address this safety concern, the City initiated a project to construct a pedestrian underpass to allow unimpeded crossing under the CSX rail lines near the Depot. From a pedestrian plaza near Main Street (to be designed and constructed), the underpass will begin on the west side of the tracks 200 feet south of the Trackside Grill Restaurant and enter the Study Area approximately 300 feet south of the Depot. The walkway from the tunnel entry point will make several runs and turns before exiting 100 feet south of the Depot at the existing grade of the parking lot. Two issues to be addressed are the CSX easement that provides CSX access to the rail spurs at this location and the relocation of the rail spurs out of the downtown area. The current easement will be located in the center of the pedestrian underpass area and a new easement will have to be determined. Additional information has been provided in Section 10, "Rail Line Spurs."

The project planning and approval process for the pedestrian underpass has taken several years, but construction is expected to begin in 2008. This solution will achieve City and CSX goals by providing a safe and enforceable pedestrian link across the rail lines. As a result of improved pedestrian safety in addition to the proposed Library's close proximity to the crossing, an opportunity to implement a silent crossing and improve buffering between the tracks and surrounding properties may exist. These sound mitigating changes would support the development of a Library and cultural arts center.

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9 Concept Formation

9.1 Initial Concepts and Descriptions

Initially, after gaining an understanding of the existing opportunities and constraints, three concepts for the Depot Study Area were created for comparison. Each concept presented the desired program elements in distinctly different configurations to provoke thought and discussion. The different concepts included the introduction of a Savannah-type square in front of the Museum, consideration of the Library in locations near the Museum and in adjacent residential areas, and the extension of CBD commercial retail elements across the rail line into the park area. Ultimately, one concept was determined to be the best fit for Kennesaw. This concept was reviewed and refined with assistance from the Steering Committee. The final Concept is discussed below.

9.2 Final Concept and Description

The final Study Area concept plan is presented in the Concept Illustration in Appendix A, Figure 18. The Concept Illustration shows the key program requirements in the Study rea and balances recommendations for change with preservation of the many historic resources and the character they establish. The vision expressed in the concept plan is the transformation of the city-owned property adjacent to the historic Depot into an inviting, attractive and fully functional central city park that will be directly associated with major community institutions such as the Museum and the proposed new regional Library. Recommendations illustrated in the concept plan are described under the headings of Library, City Park Plaza, Historic Preservation and Transportation Network.

Refer to Figures 18, 20 and 21.

10 Study Recommendations

10.1 Library

Extending to frontage on Sardis Street and Big Shanty Road, the eastern portion of city-owned property is the recommended location for a new Regional Library for Kennesaw. It is strongly desired that a new Kennesaw Regional Library be located in downtown Kennesaw and contribute to the growing mix of cultural, institutional and commercial uses. The Concept Illustration includes a conceptual footprint for a two-story, 20,000 square foot building with adjacent parking. The building will include approximately 15,000 square feet of Library facilities as well as an additional 5,000 sq. ft. of archive storage for the Museum. A community meeting room is also desired. The building should be designed for access from multiple directions, with an eastern façade adjacent to Sardis Street and a western façade on axis with a primary path in City Park

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Plaza. Due to site dimensions and other constraints, a building with an irregular plan will likely be required, as illustrated.

Concept planning for the Library area has included consideration of the several possibilities for phasing of site development and modifications to adjacent roadways. The site plan respects the current alignment of Big Shanty Road, identifying that right-ofway as the location for parking and allowing for the possibility of building construction while Big Shanty Road remains open to traffic. The primary driveway entrance to the Library is from Sardis Street at a location where Big Shanty Road is shifted and realigned to intersect with Sardis Street at a right angle.

Parking is distributed around the building, as opposed to consolidated parking in a single large lot, and situated to provide convenient parking for both the Library and the adjacent park areas, , Approximately 113 parking spaces surround the Library building on three sides, and an additional 58 spaces are shown on adjacent property. The potential exists for development of a parking structure to the south on adjacent property that could add significant capacity, depending on the number of levels of structured parking.

Pedestrian access to the Library must be established from all directions for the facility to be truly integrated into the "urban fabric" of downtown Kennesaw. From the west, a direct path is extended out of the park to a west façade entrance, with dedicated pedestrian crosswalks in the parking lot. From the east, Sardis Street sidewalks connect to the east façade entrance. North and south parking lots are directly adjacent to the Library, with short paths to either entrance.

The architectural style of the Library will be determined by numerous functional and aesthetic factors. Of primary importance is the need for the Library architecture to be sensitive to the adjacent and nearby historic structures. The architectural design of the Museum is highly significant to downtown Kennesaw. The Museum and Library will be the two largest buildings in downtown east of the railroad.

10.2 City Park Plaza

City-owned property adjacent to and east of the Depot provides an attractive location for development of a formal city-center park for downtown Kennesaw. Replacing the existing asphalt parking lot adjacent to the Depot, the City Park Plaza concept includes a network of tree-lined pedestrian paths that frame small formal lawns. Focal points of the Park Plaza include the Depot and recommended replica Lacy Hotel framing the west side and a Welcome Center (potentially using the relocated Community House) to anchor the northeast corner.

The southern portion of the City Park Plaza will be framed on the west by the pedestrian underpass. The land in this area is mostly cleared of trees and has a topographic fall to the south, both favorable existing conditions for the proposed informal amphitheater. Features adjacent to the amphitheater space include a children's playground at the

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northwest corner, restroom and concessions buildings on the north side, and a venue for replica historic farmstead structures to the south.

10.2.1 The Depot

Recommendations are to continue this building's Museum and special events function (model train displays, Historical Society display, stage background for concerts and events, etc.) Regular maintenance will be required to preserve the look and structural integrity of the Depot. Periodic renovations will be required in addition to regular maintenance.

10.2.2 Lacy Hotel (Replica)

The concept is presented to construct a full-size (approximate) replica of the historic Lacy Hotel adjacent to and south of the Depot, facing the railroad as illustrated in historic drawings and paintings. The building should be two floors in height, but needs not include a functional second floor. A high-ceiling interior space can provide a venue for public or private events (weddings, receptions) as well as serve an educational purpose in association with the Museum. On the railroad side, ground level and second floor level decks can provide trainviewing opportunities. Refer to Figures 22 and 23.

10.2.3 Welcome Center

Ideally, the Community House (B.H. Carrie House) would be rotated and shifted westward to face the proposed Cherokee Street roundabout in alignment with Cherokee Street. The structure would be renovated for use as a Kennesaw Welcome Center or similar function. A community deck/half gazebo can be added to the rear of the structure to serve as a stage for the central area of the park. The two garage structures used for art classes would be removed once the art classes and equipment could be relocated.

Despite the desirability of renovating the B.H. Carrie House, there are legitimate safety and cost concerns tied to the re-use of this building because of recently documented structural integrity issues. Lack of adequate maintenance combined with the age of the structure and its components have raised concerns about the viability of the building for re-use. The City must carefully consider all options and the impacts to the historic district designation.

10.2.4 September 11th Memorial

The memorial is currently located on Main Street between Cemetery Street and Summers Street. The memorial is more suited to reflection and remembrance in an area with more pedestrian activity and opportunity for public gatherings. The City Park Plaza provides these opportunities. The plaza is also adjacent to

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other memorials in City Park located at the corner of Main Street and Cherokee Street. The city park plaza would be a proper location for this memorial.

Though a specific site location has not been identified on the Concept illustration, possible locations for consideration are:

- In the hardscaped area between the proposed restrooms/ concession buildings.
- At the top of the amphitheater lawn behind the proposed restrooms/ concession buildings.
- At the end of one of the grass strips in front of the proposed restrooms/ concession buildings.
- Between the pedestrian underpass and the Lacy Hotel.
- At the northeast corner of Depot between the round planter/ fountain and Cherokee Street.

10.2.5 CSX Rail Line Spurs and Right of way

Two rail spurs approximately 900 feet in length are located to the east and adjacent to the two active rail lines between the Depot and the South Main Street overpass. The rail spurs are used for equipment staging for CSX maintenance activities. Occasionally, the spurs are used for temporary storage of rail cars. An easement at the southern end of the existing Depot parking lot provides CSX access to the spurs.

The City and CSX have discussed the relocation of the rail spurs to a point further south. Moving the rail spurs is important for a variety of reasons. First, the existing easement access will soon be located in the middle of the new pedestrian underpass. Therefore, the access point will have to be moved closer to the Depot or south of the underpass walkway.

Moving the access point closer to the Depot would require maintenance trucks to pass in front of the underpass walkway creating concerns for public safety and site aesthetics. The CSX R.O.W. is narrower at this location which means there is less room for trucks to maneuver once on the R.O.W. This would potentially cause the City to lose 2 or 3 valuable parking spaces. Furthermore, the 110 foot long section of underpass retaining wall that parallels the rail spurs will greatly impact the CSX's ability to safely access the R.O.W. south of the underpass. Future plans for the City Park Plaza and Lacy Hotel replica do not support R.O.W. access in this location.

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Relocating the access easement to south of the underpass would present challenges, too. Moving the access easement south of the underpass would require the easement to extend approximately 250 feet from the southeast corner of the existing parking lot along the east wall of the underpass walkway before turning west on the south side of the underpass walkway. This route would place the easement over publicly used green space, the walking trail and through a short section of trees. A 30 inch diameter RCP (reinforced concrete pipe) is also located in this area for stormwater drainage. This pipe may have to be relocated or re-installed to a deeper depth to accommodate the weight of the maintenance trucks.

In addition to easement and safety concerns other reasons to relocate the rail spurs are to clean up the R.O.W. and to support the development and area utilization plans presented in this study. Currently, the CSX R.O.W is used not only for staging maintenance activities and storing equipment, but also for storing supplies and debris. Unsightly piles of steel rails, plates, connecting hardware, and old cross ties are kept continually in plain view. Oil and grease deposits may also be found on the ground which raise concerns of groundwater and soil contamination.

The development and area utilization plans presented in this study feature the railroad and railroad components important to Kennesaw such as the underpass, the Historic Depot, the Museum, and the Lacy Hotel. All of these elements are linked by planned, useable park space, walkways, and public gathering spaces. Relocating the rail spurs will also provide an opportunity to create an earthworks berm that could be constructed to buffer the loud, passing trains from the Library and park activities and events. It is important that all adjacent land uses support the vision of a pleasant, safe, clean, and visually appealing "Cultural Campus."

10.2.6 Amphitheater

The amphitheater space illustrated in the concept is an informal open lawn of approximately 0.58 acres or 25,560 sq. ft. with a gentle slope to the southern end. Approximate lawn seating capacity is estimated to be in the range of 1,600 to 2,500 persons based on 16 sq. ft or 10 sq. ft. allotted per person, respectively. Additional seating capacity may extend into the Plaza area if the site can be graded with an appropriate, gentle slope from Cherokee Street to the amphitheater stage.

Permanent fixed seating is not anticipated; however, in recent years, the City has provided tables that seat six in close proximity to the concert stage. The City charges for the tables and has indicated that this arrangement should continue. Therefore, the final design of the amphitheater should include one or more areas to allow tables to be provided. As of 2008, 80 tables are needed for the July 4th celebration and 60 tables are needed for other events such as concerts. The

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table areas should be separated from the dance area and walkways in order to provide an enjoyable experience for the paying table guests with limited intrusion.

The amphitheater area should also provide a venue for many different types of concerts and events and remain useful for civil war re-enactment activities. A replica civil war era farmhouse located at the southern end of the amphitheater can also function as a stage structure by providing a front porch that can double as a stage. Power should be supplied to the structure for concerts. The structure would have to be designed and engineered in such a way to minimize the risk of stormwater damage since this location is the lowest point on the site and within the 25 acre watershed.

10.2.7 Children's Playground

An approximately 3,000 square foot area framed by two walls of the planned pedestrian underpass allows a secure location for a children's playground at the edge of the park, with views of the railroad, Lacy Hotel, park and amphitheater lawn. Construction of the pedestrian underpass should leave this area level, stable and clear for placement of play structures and a play surface. The area should be fenced on all four sides with child-safe gates to ensure children are not able to easily leave the playground without parental assistance. Equipment (5-12 yr olds) from the existing playground could be re-located to the new location if the equipment is still in good condition. Additional equipment such as swings may be needed. Equipment for 2-5 year olds should be added in the new area.

10.2.8 Restrooms/Concessions Buildings

The concept includes two small structures framing the top (north) end of the amphitheater. These structures should be constructed for public restroom and concessions purposes on a pedestrian plaza overlooking the amphitheater lawn.

10.2.9 Replica Historic Farmstead

Civil war re-enactment enthusiasts and Museum staff currently use the southernmost portion of the city-owned property (as well as privately owned properties to the southeast) for a variety of demonstrations and educational purposes. The area, under mature oak trees below the amphitheater stage with rolling topography, offers the opportunity for construction of replica historic farmstead buildings (cabin, barn, smokehouse, etc.) to be associated with Museum program. Integrating the farmstead (including the amphitheater structure) and the civil war components will be a great challenge. It will be critical to ensure that the two functions complement one another but retain

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separate identities for program purposes while providing the public with optimal viewing and interaction opportunities.

10.3 Historic Preservation

The concept plan for the Study Area is intended to achieve a high level of historic preservation sensitivity while dramatically enhancing the public space, improving opportunities for public use and building community character. Of the several historic structures that contribute to the historic district status in the immediate vicinity of the Depot, only the Community House is recommended to be moved from its foundation, and in that case to a position within approximately 50 feet of its historic location. Relocation of another historic structure on Cherokee north of the Wedding Chapel will be required due to the Sardis Street Extension. It is likely that this structure will need to be relocated less than 50 feet from its current location. In addition to the intent to keep the majority of historic structures intact and in their historic location, it is the intent of this plan to encourage new building design and construction that is sensitive to the historic character of the area.

10.4 Transportation Network

The comprehensive recommendations for improvement to the downtown Kennesaw transportation network are described in Sections 11, 12 and 13 of this report. With respect to their impact on the future of the Study Area, the key transportation network improvements include the Sardis Street Extension, Big Shanty Road realignment, and Cherokee Street roundabout.

10.4.1 Sardis Street Extension

The proposed Sardis Street Extension and associated new railroad overpass north of the Museum will ultimately provide a route for traffic to flow from east to west without crossing the railroad at Cherokee Street. As the Study Area increasingly becomes a cultural and institutional district, this route will provide a necessary reduction of traffic volume and congestion on Cherokee Street. Sardis Street will also serve as the primary road frontage for the new Kennesaw Regional Library and will provide an appropriate level of visibility.

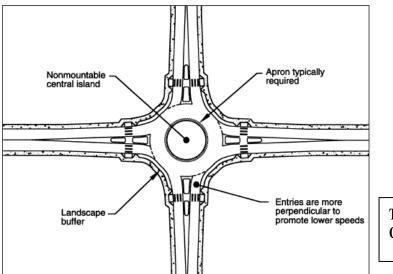
10.4.2 Big Shanty Road Realignment

Rerouting Big Shanty Road to intersect into Sardis Street and closing the section of Big Shanty between Sardis Street and Cherokee Street will expand the area for development of the Library building and parking. Traffic that has used Big Shanty as an east-west route through downtown Kennesaw will be rerouted to the Sardis Street Extension.

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10.4.3 Cherokee Street Roundabout

A functional and aesthetic solution to the irregular intersection of Cherokee Street, Shirley Drive and Big Shanty Road is an urban compact roundabout. With the Sardis Street Extension and northside railroad overpass planned to reduce traffic volume and congestion on Cherokee Street, it is anticipated that an urban compact roundabout intersection will adequately handle traffic internal to the City Park Plaza-Museum-Library area. With traffic speeds on the radiating streets in the range of 15 miles per hour, a safe environment can be established for motorists and pedestrians. The roundabout design with landscaped center island (and potential fountain location) will establish a focal point in downtown Kennesaw associated with the Park, Library and Museum.



Typical Layout for an Urban Compact Roundabout

Source: Source: U.S. DOT Department of Transportation, Federal Highway Administration, Publication No. FHWA-RD-00-0067

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Table 9: Basic Roundabout Design Characteristics

| Design Element | Mini- Roundabout | Urban Compact | Urban Single - Lane | Urban Double - Lane | Rural Single - Lane | Rural Double - Lane | |
|--|--|----------------------------|-------------------------------------|-------------------------------------|--|--|--|
| Recommended maximum entry design speed | 15 mph | 15 mph | 20mph | 25 mph | 25 mph | 30 mph | |
| Maximum number of entering lanes per approach | 1 | 1 | 1 | 2 | 1 | 2 | |
| Typical inscribed circle diameter | 45 to 80ft | 80 to 100ft | 100 to 130ft | 150 to 180ft. | 115 to 130ft. | 180 to 200ft. | |
| Splitter island treatment | Raised if possible, crosswalk cut if raised | Raised, with crosswalk cut | Raised, with crosswalk cut | Raised, with crosswalk cut | Raised and extended, with crosswalk cut | Raised and extended, with crosswalk cut | |
| Typical daily service volumes on 4-leg roundabout (veh/day) | 10,000 | 15,000 | 20,000 | *VAR | 20,000 | *VAR | |

Source: U.S. DOT Department of Transportation, Federal Highway Administration, Publication No. FHWA-RD-00-0067

10.5 Parking

The proposed changes to the Study Area will have immediate and long-term impacts on parking in the downtown area. The greatest impacts will likely occur during special events rather than during normal day-to-day activities. Public parking is primarily available along Main Street, Lewis Street, Watts Drive, City Hall, the Museum, Adams Park, the Kennesaw Library and the parking lots at the corner of Moon Station Road/Main Street and adjacent to the Trackside Grill Restaurant. For special events the City relies on parking assistance from the downtown property owners such as Kennesaw First Baptist Church and United Christ Church (The Wedding Chapel).

Proposed parking additions in the Study Area could increase the number of public and shared parking spaces by 114. The number of shared parking spaces is expected to decrease by 3 before arrangements with the Madison Retail Development are considered. Private Parking will increase with new retail and mixed-use development. The recommendations given in the 2006 Lanier Parking Systems Parking Study should continue to be considered and implemented where reasonable to do so.

^{*} requires additional calculations

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Table 10: Parking Inventory

| Type of Parking | | | Existing | | Proposed | |
|-----------------|----------------------|--|----------------|--------------|----------------|-----------------|
| | | | Number | Number of | Number of | Number of |
| | *Parking Designation | Location | of | | | |
| | | | Spaces- Bus | Spaces- | Spaces- Bus | Spaces- Auto |
| Deals a Danie | da a | | DUS | Auto | DUS | Auto |
| Public Park | ing | Adams Park Surface Lot (Court | | | | |
| Pu | Suface Lot 1 | Parking) | | 83 | | 83 |
| Pu | Suface Lot 2 | City Hall | | 37 | | 37 |
| Pu | On Street Lot 2A | City Hall (On-Street) | | 20 | | 20 |
| Pu | Surface Lot 2B | City Hall | | 3 | | 3 |
| Pu | On-Street Lot 4 | Hair Junction (On Street) | | 11 | | 11 |
| Pu | On-Street Lot 6 | Whistle Stop (On Street) | | 7 | | 7 |
| Pu | On-Street Lot 7 | Whistle Stop (Side of Building) | | 6 | | 6 |
| Pu | On-Street Lot 13 | North Main Railroad (On Street) | | 7 | | 7 |
| Pu | Surface Lot 14 | The Depot (Paved Parking only) | 4 | 30 | 4 | 30 |
| Pu | Surface Lot | Community House (by Garages) | 4 | 10 | 4 | 0 |
| Pu | Surface Lot | Field by Community House | | 50 | | 0 |
| 10 | Solidce Loi | Trackside City Lot | | 30 | | 0 |
| Pυ | Surface Lot 16B | (16 at CSX underpass) | | 30 | | 14 |
| Pu | Surface Lot | Museum (Cherokee St.) | | 7 | | 0 |
| Pu | Surface Lot | Museum (Shirley Dr.) | 4 | 78 | 4 | 78 |
| Pu | Surface Lot | Adams Park- Soccer Field | | 144 | | 144 |
| Pu-new | Surface Lot | KDDA (Main St. and Moon Station) | | 31 | | 31 |
| Pu-new | Surface Lot | New Library | | 0 | | 122 |
| Pu-new | Surface Lot | Welcome Center | | 0 | | 18 |
| | Parking Deck | Museum- Shirley Drive | | 0 | | 60 |
| Pu-new | T CIKING DECK | Moseoni- Sililey Drive | | 0 | | 80 |
| | | Public Subtotal | 8 | 554 | • | /71 |
| Chaus al Daud | latur au | Fublic 3ubioidi | 0 | 334 | 8 | 671 |
| Shared Par | | Libran | | 22 | | _ |
| <u>S</u> | Surface Lot 9 | Library | | 33 370 | | 370 |
| 3 | Surface Lot 18 | 1st Baptist Church United Christ Church (Wedding | | 3/0 | | 3/0 |
| S | Surface Lot | Chapel) | | 62 | | 62 |
| 3 | 3011dCe LOI | Retail at Cherokee Street/ Sardis | | OZ. | | 02 |
| S- new | Surface Lot | Street Extension | | 0 | | 30 |
| | | Madison Retail (No. of parking | | | | |
| S- new | Surface or deck | spaces unknown) | | 0 | | 0 |
| | | Shared Subtotal | | 465 | | 462 |
| | | Public and Shared Parking Subtotal | 8 | 1019 | 8 | 1133 |
| Private Parl | kina | | | | | |
| Pv | Surface Lot 3 | Hair Junction | | 17 | | 17 |
| Pv | Surface Lot 5 | Eaten Chiropractic (Surface) | | 12 | | 12 |
| Pv | Surface Lot 8 | Big Shanty Retail | | 23 | | 23 |
| Pv | Surface Lot 10 | General Practice of Chiropractic | | 9 | | 9 |
| Pv | Surface Lot 11 | Family Dentistry | | 40 | | 40 |
| Pv | Surface Lot 12 | Home School Resource Center | | 10 | | 10 |
| Pv | Surface Lot 15 | Trains & Hobbies | | 10 | | 10 |
| Pv | Surface Lot 16A | Trackside Grill | | 8 | | 8 |
| • • | 3011400 201 10/1 | Historic Village (SE corner of Museum- | | <u> </u> | | 0 |
| Pv | Surface Lot |) | | 21 | | 21 |
| | | Private Subtotal | | 150 | | 150 |
| | | | | | | 1.00 |
| | | Grand Totals | 8 | 1,169 | 8 | 1,283 |
| | 1 | | | .,, | | . ,200 |

Source: *2006 Parking Survey by Lanier Parking Services, MACTEC Engineering and Consulting

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10.5.1 Additional Traffic and Parking Studies

A City-wide traffic study was performed in 1999 by StreetSmarts. The report documented current traffic counts and Levels of Service (LOS) for the roads and intersections within the City. The report projected future traffic counts and LOS, and made recommendations for improvement projects. Cost estimates for the projects were also included. The study referenced improvements to sections of Big Shanty Road, Sardis Street, Cherokee Street and the addition of a new overpass, all of which are also reflected in this study's recommendations.

MACTEC also performed traffic counts at key intersections in June 2007. This data has been included in a table in addition to the 1999 StreetSmart data. Refer to Appendix E for this information.

A comprehensive parking study was performed by Lanier Parking Services and presented to the City in June 2006. The study documented existing parking conditions and supply, projected future demand, and devised governing, funding and implementation strategies. Analysis revealed that sufficient parking was generally available; however, during peak times there was a shortage throughout the downtown area. Geographic distribution and employee use of public parking spaces contributed to the parking shortage during peak times. Recommendations were divided into short term and long term strategies. In the short term, improvements to public parking directional signage and increased availability of parking maps and brochures were suggested. A Parking Fee Program was also recommended which may include on-street metered parking, low cost daily parking lots and fees for prime parking locations for special events.

As the downtown business community and the City government grow to meet the needs of the citizens, customers and guests, consideration should be given to establishing a downtown employee-only parking lot. This lot may be located in a prime location that could convert to a fee lot for special events. Depending how development progresses, the employee only parking lot may also be a multi-level deck to more adequately meet the downtown needs.

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11 Transportation Planning Alternatives

11.1 Introduction

There are essentially two components to the transportation improvement element of the study. The first component provides the required Scope of Work for the Sardis Street Extension and new CSX overpass which is presented in the Project Concept Report on the following pages. The Concept Report includes standard DOT data, roadway design features, construction timeline estimates, accident summary reports and an Opinion of Probable Costs.

Secondly, a by-product of this effort is a precursory study of roadway improvements for the CBD. This precursory study was a result of the pursuit to fully understand the impacts of extending Sardis Street to Moon Station Road. Previous downtown studies and master plans have recommended the Sardis Street Extension, but these studies did not go to the extent to fully address the implications and impact to existing surface streets and more importantly, what happens within the CBD once this loop (North Main Street to Sardis Street to South Main Street) is created. With the regional increase in population and housing, and the increasing congestion on I-75 and Cobb Parkway, an increasing number of commuters use the local streets as alternative routes across town. During heavy commute periods, many of these surface streets are congested and become virtually impassable when trains pass through town. This Study, combined with the numerous approved and proposed development projects in the CBD, presents the City with analysis of issues that will directly and indirectly impact the Study Area as well as the entire CBD.

11.2 Development of Alternative Street Network Concepts

Several studies and master plans for downtown Kennesaw have recommended that Sardis Street be extended northward and behind the Museum bridging over the railroad and terminating at Moon Station Road. Many residents, commuters, elected officials and City staff recognize the need for and benefit of an additional Railroad overpass. The at-grade crossing at Cherokee Street poses real safety issues with current traffic volumes. A growing regional population with proportionate traffic increases will only add to the congestion of this crossing and to all of the downtown area roads. New developments in the CBD, including private mixed-use developments and the proposed regional Library, will introduce additional residents and visitors to downtown. The precursory study that led to the final Depot Illustrative Concept attempted to address these issues and provide solutions at a conceptual level for transportation and potential land use impacts.

Many road re-alignment concepts were considered and discussed in the process of completing the final horizontal alignment concept for the Sardis Street Extension and Study Area. Ultimately, six road alignment concepts were considered as possible solutions for incorporation in the Study. Within these six concepts, possible solutions to

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traffic problem areas in Kennesaw's CBD are addressed, including most notably, Big Shanty Road at Cherokee Street, Moon Station Road at Main Street, Main Street at Dallas Street, Dallas Street at Lewis Street and Dallas Street at Watts Drive. The underlying cause behind problems at these intersections is that these intersections do not intersect at right angles; but rather at very acute angles which causes safety to be compromised. The roads either "peel away" or lazily converge with one another, much like two wagon trails would have in the 1800's.

The six road alignment concepts and their impact to existing and future land use are described below and presented on the following pages. A final road alignment concept that reflects the final Depot Concept Illustration is also provided.

11.2.1 Big Shanty Road / Cherokee Street Extension 1 Concept

The Shanty/ Cherokee Extension 1 Concept presents a direct connection from I-75 along New Cherokee Street to North Main Street. Sardis Street is extended, but only to New Cherokee Street. The existing Cherokee Street would become a historic street supporting only local traffic where as the New Cherokee Street would accommodate "pass-through" traffic thereby helping to preserve the quaint, historic district along Old Cherokee Street. Similar to the "Sardis Street Extension 2" concept, the "Shanty/ Cherokee Extension 1" concept resolves the issues of connecting North Main Street to the Sardis Street Extension (now New Cherokee Street) and left turn traffic at Moon Station Road and Main Street. A grid network of streets is established in the CBD as well.

There are two new elements introduced in this concept alternative. One is the addition of a new route for Big Shanty Road from near Pine Hill Circle to Cobb Parkway. This concept would construct a new RR overpass at the southern end of the Study Area and eliminate the existing CSX overpass on South Main Street. This concept allows a "Cultural Campus" grid to be established in the Study Area. An obvious undesirable outcome of this concept is that the route would split the Camp McDonald and Summers Street Historic Districts, which directly impacts the Kennesaw City Cemetery and the Old Kennesaw School.

A second concept that is introduced presents the idea that Main Street would intersect the Big Shanty Extension at Summers Street and then continue along Summers Street to Cobb Parkway. The first concept eliminated the South Main Street bridge forcing Main Street to join Summers Street. This concept expands the opportunity for Mixed-Use or even Commercial land use applications between the new Main Street route and the rail line, which would offer convenience and opportunities for additional housing and commercial market diversity in the CBD.

Refer to Figure 12 in Appendix A.

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11.2.2 Big Shanty Road / Cherokee Street Extension 2 Concept

Continuing to explore the ideas presented in the "Shanty/ Cherokee Extension 1" concept, this concept presents more aggressive strategic recommendations for the transportation network and land use applications. The ideas of the Cultural Campus, an expanded street grid, the Big Shanty Road extension and a direct route from I-75 to the CBD are maintained, but are slightly adjusted. The more extreme modification presented in this concept is the re-routing of Cherokee Street from near Cherokee Ridge Trail south to South Main Street near the Duncan Road intersection. This idea establishes a large transportation block with smaller street grids inside the block that reconfigure the Cherokee Street Historic District and adjacent residential land uses.

A strong, direct connection between North Main Street and Cherokee Street is also established. This route is similar to previous Sardis Street Extension routes. The link between North Main Street, Dallas Street, and Watts Drive is also addressed as Dallas Street (including Watts Drive) becomes a primary access route between Cobb Parkway and North Main Street. A new city block at Main Street and North Main Street is also created with the section of Lewis Street between Dallas Street and North Main Street becoming one-way only for southbound traffic. Northbound traffic on Dallas Street would access North Main Street at the Dallas Street intersection. Watts Drive will be used as the primary pedestrian link between Adams Park and the Depot using the Pedestrian Underpass.

Refer to Figure 13 in Appendix A.

11.2.3 Sardis Street Extension 1 Concept

This concept presents the most basic and conservative conceptual alignments concerning Sardis Street and the surrounding land uses. Whitfield Place becomes an extension of the Sardis Street Extension, but fails to provide a solution to terminating safely at North Main Street. Big Shanty Road between Sardis Street and Cherokee Street has been eliminated and this area is selected as the location for the Library. A new secondary or access road divides the Study Area between the rail line and Sardis Street creating distinctive zones for Mixed-Use, Greenspace and Cultural land uses.

Refer to Figure 14 in Appendix A.

11.2.4 Sardis Street Extension 2 Concept

This concept is similar to the previous concept, but provides a solution as to how the Sardis Street Extension will terminate at North Main Street. Utilizing the Whitfield Place right of way, Sardis Street Extension and North Main Street are merged together near Kennesaw First Baptist Church. This allows Main Street to align and merge with Moon Station Road, which solves the current left turn issues at Moon Station Road and Main Street. This solution also creates a prominent intersection and gateway at Moon Station

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Road and Main Street, increases the CBD by one large or two smaller city blocks (potentially doubling the current size of the downtown) establishes a traditional grid pattern in the CBD, and provides two primary alternatives for Main Street traffic to navigate through the CBD.

The new public parking lot at the corner of Moon Station Road and Main Street would be impacted as well as the existing small businesses in the proposed new City block area, but the long term benefits of expanding the CBD deserve strong consideration. The proposed land use functions will remain similar to those presented in Sardis Street Extension 1 concept.

Refer to Figure 15 in Appendix A.

11.2.5 Big Shanty Road Extension vs Duncan Road Extension Concept

Two transportation alternative concepts are presented in Figure 16. Several of the key elements from each plan have been presented in the concepts described above. These concepts primarily address the street networks south of the CBD near South Main Street, Summers Street, Duncan Road, and Big Shanty Road. The main purpose for exploring these concepts is to understand how the neighborhoods along Big Shanty Road are impacted in the various scenarios presented above. The primary difference in the two concepts is that the Duncan Extension would route high volume traffic away from the residential section of Big Shanty Road, in theory improving safety and quality of life issues. However, the Duncan Road extension would negatively impact the homes fronting Duncan Road in terms of safety and quality of life. From a planning perspective, the Duncan Road Extension provides opportunities for alternative access routes to the industrial properties that front McCollum Parkway.

Refer to Figure 16 in Appendix A.

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12 Final Street Network Concept and Associated Elements

12.1 Sardis Street Extension

The final layout incorporates elements from all conceptual alternatives. The transportation data utilized for this project indicate that the primary flow of traffic is decisively oriented north-south along Main Street. Relatively fewer trips are documented in an east-west pattern. Therefore, emphasis has been given to establishing a strong north-south connection through town via the Sardis Street Extension. The New Cherokee Street has merit in terms of preserving the historic character of Cherokee Street and expediting traffic flow into the CBD.

The Sardis Street Extension will utilize an existing easement at the Big Shanty Road intersection. The ultimate path of the Sardis Street Extension takes the roadway north from Big Shanty Road to Cherokee Street across from the historic structure that houses the Wedding Chapel Office. The path would require that this structure be relocated approximately 30 feet to the south. The path would continue north across the northern edge of the wedding chapel parking lot, across Shirley Drive, and to the right-of-way north of the Museum's rear parking lot to align with the Whitfield Place Right-of Way. The overpass would traverse the rail lines and intersect with Moon Station Road. Whitfield Place would be re-aligned with North Main Street thereby providing opportunities to create a new city block between Lewis Street and North Main Street. Dallas Street would be improved to create a major east-west corridor connecting Main Street to Cobb Parkway.

This arrangement will improve traffic flow on Moon Station Road and at the Dallas Street/ North Main Street intersection. The current 700-foot section of North Main Street between Whitfield Place and Moon Station Road will close and become part of the new city block. At the South Main Street intersection with Sardis Street, a right turn lane is required to facilitate easy access to Sardis Street for northbound traffic on South Main Street.

Refer to Figure 17 in Appendix A.

12.2 Big Shanty Road Realignment

To construct the Library and associated parking in the proposed locations, Big Shanty Road should be realigned between Pine Hill Circle and Sardis Street to intersect Sardis Street at a right angle. This will greatly improve safety for this intersection. The section of Big Shanty Road between Sardis Street and Cherokee Street should be closed and used for the Library or Library parking.

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12.3 Roundabout

The roundabout that is proposed at the Shirley Drive, Cherokee Street and Library parking lot intersection will improve geometry, safety and appearance. It should be designed for low speeds and promote traffic calming in the area.

12.4 Cherokee Street At-Grade Crossing

It is the intent of the study to provide alternative transportation routes for vehicular and pedestrian traffic entering and leaving the downtown area. The alternative routes are to relieve congestion and improve safety at the Cherokee Street At-Grade crossing. The crossing should remain open as it is a key component to maintain access to the Museum, the Library and downtown businesses.

12.5 New Railroad Overpass

The Concept Illustration reflects the construction of the RR overpass north of the Museum and aligned with Whitfield Place. There will be a loss of several large trees in this area as well as a few non-historic structures. One or possibly two historic structures will have to be relocated along Moon Station Road at Whitfield Place to make room for the overpass right-of-way.

12.6 Lewis Street and Dallas Street

Under the proposed concept, the section of Lewis Street between North Main Street and Dallas Street should be modified to reflect a one-way street for southbound traffic from North Main Street. Another consideration would be to close this section of Lewis Street completely and redevelop the area between the Alta and Ultima development and North Main Street. This will allow for the development of an additional city block. Northbound traffic on Lewis Street from Dallas Street will be required to enter Main Street from the new intersection at Dallas Street and North Main Street.

In addition, under this concept, Dallas Street will require improvements as it will become a major thoroughfare that connects North Main Street to Cobb Parkway. Intersection improvements at Lewis Street, J. O. Stephenson Avenue and Watts Drive will be required. Pedestrian improvements should also be included.

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12.7 New Cherokee St. Extension

Further development and study of the New Cherokee Street Extension is needed. The concept contains several positive aspects that could be beneficial to the City such as preserving the historic character of Cherokee Street, providing an improved direct route into the City from I-75, and encouraging potential redevelopment opportunities along and north of the proposed right-of way.

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13 Sardis Street Extension Transportation Improvements Concept Report

The following pages contain the narrative descriptions, technical data, and opinion of probable costs associated with the Sardis Street Extension, including the addition of the second CSX overpass. Many of the elements in the concept report have been mentioned in previous sections, but have not been supported by the technical data that is provided in the report. The data and opinion of costs presented in the concept report are independent of the opinion of costs provided for development of program elements in the Depot Study Area.

Refer to Figures 18, 20, and 21 in Appendix A.

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City of Kennesaw Cobb County

PROJECT CONCEPT REPORT

Downtown Kennesaw Roadway Improvements

Project Number: XXX-0000-00(00) County: Cobb P. I. Number: 00000

Federal Route Number: N/A State Route Number: N/A

| DATE | |
|------|------------------|
| | City of Kennesaw |

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13.1 Need and Purpose

The downtown Kennesaw area is comprised of a variety of buildings, open spaces and land uses within a relatively small area. Due to the rapid pace of ongoing development, the potential for new downtown, multi-use projects and the desire to manage growth, the City has identified a need to develop a focused study and plan for associated transportation improvements for the downtown area. The transportation improvements, while developed in conjunction with the master plan, are also considered independent of it and are further discussed and described in this report and on the associated Kennesaw Transportation Improvements concept plan.

The existing downtown Kennesaw roadway network is severely constrained by an atgrade railroad crossing at the Cherokee Street and Main Street intersection, the downtown area's primary intersection with direct access to City Hall, the Study Area and the Museum. A new grade separated crossing is required to alleviate congested traffic conditions and severe truck restrictions downtown.

The primary road through downtown is Main Street which follows a general southeast to northwest alignment and provides access between larger roadways, including McCollum Parkway to the south and Jiles Road to the north. Cherokee Street and Big Shanty Road are existing 2 lane facilities providing access from the primarily residential areas east of downtown to the city's Central Business District (CBD) and City Hall with continued movements to SR 41 / US 3, Cobb Parkway further west. The movement of traffic throughout the day, and especially at peak hours, becomes problematic for traffic crossing Main Street at un-signalized intersections. Coupled with the poor atgrade railroad crossing and the numerous trains, traffic conditions through downtown can become very congested and slow. The project requirements include establishing a new roadway network that includes extending Sardis Street, providing improved intersections and constructing a new grade separated railroad crossing.

13.2 Description of the Proposed Project

This project will provide for roadway improvements in the downtown Kennesaw area including the following:

- Sardis Street Extension from the existing, realigned terminus at Big Shanty Road northward, and curving to the west to tie into the realigned Main Street.
- Proposed new structure over CSX railroad.
- Realignment of Main Street and Moon Station Road intersection.
- Realignment and extension of Cherokee Street to a new intersection with Sardis Street Extension.

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Roadway modifications, resurfacing and additional select intersection.
 improvements throughout the downtown Kennesaw roadway network including improvements associated with the City's master plan for the internal, downtown core area.

The new Sardis Street Extension is proposed to be a three lane section with turn lanes at the intersections and urban shoulders. The project improvements will also include improved pedestrian amenities such as wide sidewalks, crosswalks and signalization within various sections of the project. Both the northwestern and southeastern project termini will match the existing Main Street alignment. The side roads will also tie into the Sardis Street Extension.

Is the project located in a Non-attainment area? (X) Yes. The project is located in Cobb County.

PDP Classification: Major Minor (X)

Federal Oversight: Full Oversight (), Exempt(), State Funded(), or Other (X)

None at this time.

Functional Classification: as defined in the Cobb County Major Thoroughfare Plan; Main Street – arterial; Cherokee Street – arterial; Moon Station Road – Major collector; Big Shanty Road – minor collector. All other – residential / local / unclassified.

U. S. Route Number(s): N / A State Route Number(s): N / A

Traffic (AADT): Main Street

Current Year: (2005) 19,650 Design Year: (2025) 24,000 Assume 1% per year growth

Existing design features

• Typical Section: Main Street; the existing roadway section is 3 lanes, undivided, with a center turn lane, curb and gutter and concrete sidewalks along both sides. All other roads are 2 -lane urban sections with curb and gutter with the exception of Sardis Street which has no curbing or sidewalks.

Posted speed 25 mph.
 Minimum radius for curve: 185 ft.

• Maximum super-elevation rate for curve: 6 %

• Maximum grade: 8 %

• Width of right-of-way: Main Street - 50 ft.; all others – varies.

Major structures: Main Street bridge over CSX RR

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Major interchanges or intersections along the project: None.

Proposed Design Features

- Proposed typical section(s): Sardis Street Extension: 3 Iane urban section, turning lanes at the intersections with curb and gutter and 8 ft wide concrete sidewalks on both sides. All others are 2 Iane, urban sections with curb and gutter and 8 feet sidewalks, auxiliary Ianes as required.
- Proposed Design Speed Mainline: 25 mph.
- Proposed Maximum grade Mainline: 5 % Maximum grade allowable: 8 %.
- Proposed Maximum grade Side Street: 5 % Maximum grade allowable: 8 %.
- Proposed Maximum grade driveway: 12 %.
- Proposed Minimum radius of curve: N/A Minimum radius allowable: 185 ft.
- Right-of-Way
 - o Width: 100 feet
 - Easements: Temporary (X), Permanent (), Utility (), Other ().
 - o Type of access control: Full (), Partial (), By Permit (X), Other ().
 - Number of parcels: XXX
 Number of displacements: XXX
- Structures:
 - o Bridges Proposed new bridge over CSX RR.
 - o Retaining walls Gravity walls as required.
- Major intersections and interchanges. No major intersections; all others shown on plan.
- Traffic control during construction: The project improvements shall be constructed while maintaining traffic.
- Design Exceptions to controlling criteria anticipated:

| | <u>UNDETERMINED</u> | <u>yes no</u> |
|--------------------------|---------------------|---------------|
| HORIZONTAL ALIGNMENT: | () | () (X) |
| ROADWAY WIDTH: | () | () (X) |
| SHOULDER WIDTH: | () | () (X) |
| VERTICAL GRADES: | () | () (X) |
| CROSS SLOPES: | () | () (X) |
| STOPPING SIGHT DISTANCE: | () | () (X) |
| SUPERELEVATION RATES: | () | () (X) |
| HORIZONTAL CLEARANCE: | () | () (X) |
| SPEED DESIGN: | () | () (X) |

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| VERTICAL CLEARANCE: | () | () (X) |
|-----------------------------|-----|--------|
| BRIDGE WIDTH: | () | () (X) |
| BRIDGE STRUCTURAL CAPACITY: | () | () (X) |

- Design Variances None anticipated
- Environmental concerns: The downtown area has numerous historic resources and portions of the downtown area are in a historic district. Their disposition will be further evaluated and addressed during preparation of the environmental document and coordination with the ongoing downtown projects. At a minimum, one historic structure, the wedding Chapel office, at the northeast corner of the Wedding Chapel property should be relocated on site. As an alternative the adjacent structure located at 2905 Cherokee Street could be acquired. A possible remediation technique for other affected resources could be the relocation and reconstruction of a period structure at an acceptable location. There are no other significant or apparent environmental concerns.
- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes (), No (X),
 - o Categorical exclusion (X),
 - o Environmental Assessment/Finding of No Significant Impact (FONSI) (), or
 - o Environmental Impact Statement (EIS) ().
- Utility involvements: All major utilities; electric, water, communications, gas and sewer are present within the project corridor. The project improvements will require utility modifications and relocations. Utility accommodations will be included along the Sardis Street Extension since it is on new alignment.
- Railroad Involvement: There is an existing, problematic at-grade crossing within
 the downtown area that is anticipated to remain; however, the new bridge
 crossing will redistribute significant traffic volume from it, thereby vastly improving
 the safety and operational conditions at the existing at-grade crossing.
 Coordination with CSX will be required as part of the new crossing. The City has
 an ongoing relationship with CSX.

VE Study Required Yes() No(X)

13.3 Project Responsibilities

- Design: City of Kennesaw
- Right-of-Way Acquisition: City of Kennesaw
- Relocation of Utilities: Utility company
- Letting to contract: City of Kennesaw
- Supervision of construction: City of Kennesaw
- Providing material pits: N/A
- Providing detours: N/A

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13.4 Coordination

- Project kick-off meeting with the City of Kennesaw, City Hall offices. In addition, several project status meetings have been held with the City's stakeholder committee from May to September, 2007.
- Public involvement: none to date.
- Local government comments. These roadway improvement projects and the associated downtown improvements have the support and backing of the City of Kennesaw.
- Other projects in the area Multiple proposed and planned adjacent ongoing private development and several municipal projects including a pedestrian underpass of the RR tracks and a proposed new county Library.
- Railroads: Ongoing communication with the City
- Other coordination to date: None

13.5 Scheduling

The following durations represent reasonable periods of completion and the best estimates for each respective task. However, due to the nature of the downtown development, the anticipated funding sources, the construction timelines of the various projects and other unknown factors at this time, these durations are subject to revision and updating.

- Time to complete the environmental process: 8 Months.
- Time to complete preliminary construction plans: 6 Months.
- Time to complete right-of-way plans: 3 Months.
- Time to complete final construction plans: 4 Months.
- Time to complete to purchase right-of-way: 12 Months.
- List other major items that will affect the project schedule:
 - Railroad Coordination the new bridge crossing and the disposition of the existing at-grade crossing will require coordination and review with CSX.
 - Phasing and implementation of overall project improvements. See following discussion.

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13.6 Phasing, Implementation, and Costs

An additional project concern is the overall implementation and phasing of the project roadway improvements in conjunction with the ongoing developments and other downtown projects, especially the proposed new Library. The proposed Library project will be constructed prior to the complete Sardis Street Extension, however a portion of Sardis Street, from its current terminus at Big Shanty Road to Cherokee Street, will need to be constructed to facilitate the Library construction. This will shift additional traffic loads to the new intersection at Cherokee Drive necessitating improvements to Cherokee Street including the addition of a turn lane. While the available space for improvements is limited at Cherokee Street, there should be sufficient room to construct the minimal required turn lane. The adjacent parking area can be encroached upon.

Complete Phasing Implementation Schedules may be referenced in Appendix F, Table 34 and Table 35.

Opinion of Costs for the transportation improvement recommendations are included in Appendix C, Tables 19 and 20.

13.7 Other Alternates Considered

Over the past several years, the City has solicited several alignment and planning studies that were made available in preparation of this report. These studies were reviewed and considered as part of this downtown development study. Also considered is an optional on-street parking section for select areas of Sardis Street. Implementation of this section will require extending right of way from 80 feet to 100 feet of total width. Specific location will be identified during subsequent design phases in coordination with the adjacent developments.

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13.8 Accident Summary Data

Accident Summary Downtown Depot Study Transportation Improvements City of Kennesaw, Cobb County

| Main Street and Sardis Street | | | | | | | |
|--------------------------------|------|------|------|------|------|------|-------|
| Accident Type | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | TOTAL |
| Head-on / Conflicting Movement | 0 | 1 | 0 | 0 | 1 | 0 | 2 |
| Sideswipes / Lane Changes | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rear Ending | 5 | 1 | 1 | 3 | 1 | 0 | 11 |
| Fixed Objects | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 5 | 2 | 1 | 3 | 2 | 0 | 13 |
| | | | | | | | |
| Injuries | 0 | 0 | 0 | 0 | U | Ü | 0 |
| Fatalities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Night Time | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: Georgia Department of Transportation CARE database, 2001-2005

| Main Street and Summers Street | | | | | | | |
|--------------------------------|------|------|------|------|------|------|-------|
| Accident Type | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | TOTAL |
| Head-on / Conflicting Movement | 0 | 0 | 0 | 0 | 1 | 2 | 3 |
| Sideswipes / Lane Changes | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rear Ending | 0 | 0 | 0 | 0 | 1 | 3 | 4 |
| Fixed Objects | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Total | 0 | 0 | 0 | 0 | 4 | 5 | 9 |
| | | | | | | | |
| Injuries | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| Fatalities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Night Time | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: Georgia Department of Transportation CARE database, 2001-2005

| Main Street and Watts Drive | | | | | | | |
|--------------------------------|------|------|------|------|------|------|-------|
| Accident Type | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | TOTAL |
| Head-on / Conflicting Movement | 2 | 4 | 0 | 2 | 1 | 0 | 9 |
| Sideswipes / Lane Changes | 1 | 0 | 0 | 0 | 1 | 0 | 2 |
| Rear Ending | 1 | 4 | 1 | 3 | 5 | 2 | 16 |
| Fixed Objects | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 4 | 8 | 1 | 5 | 7 | 2 | 27 |
| | | | | | | | |
| Injuries | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Fatalities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Night Time | 0 | 1 | 0 | 0 | 1 | 0 | 2 |

Source: Georgia Department of Transportation CARE database, 2001-2005

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| Main Street and Cherokee Street | | | | | | | |
|---------------------------------|------|------|------|------|------|------|-------|
| Accident Type | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | TOTAL |
| Head-on / Conflicting Movement | 3 | 1 | 4 | 1 | 2 | 0 | 11 |
| Sideswipes / Lane Changes | 0 | 1 | 1 | 0 | 2 | 1 | 5 |
| Rear Ending | 8 | 2 | 5 | 11 | 5 | 3 | 34 |
| Fixed Objects | 2 | 0 | 0 | 0 | 1 | 2 | 5 |
| Total | 13 | 4 | 10 | 12 | 10 | 6 | 55 |
| | | | | _ | _ | | |
| Injuries | 2 | 1 | 0 | 2 | 2 | 1 | 8 |
| Fatalities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Night Time | 1 | 2 | 1 | 0 | 0 | 0 | 4 |

Source: Georgia Department of Transportation CARE database, 2001-2005

| Main Street and Moon Station Road | | | | | | | |
|-----------------------------------|------|------|------|------|------|------|-------|
| Accident Type | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | TOTAL |
| Head-on / Conflicting Movement | 3 | 2 | 1 | 2 | 1 | 3 | 12 |
| Sideswipes / Lane Changes | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Rear Ending | 2 | 1 | 3 | 3 | 1 | 1 | 11 |
| Fixed Objects | 0 | 1 | 0 | 1 | 0 | 1 | 3 |
| Total | 5 | 5 | 4 | 6 | 2 | 5 | 27 |
| | | | | | | | |
| Injuries | 1 | 0 | 0 | 2 | 0 | 0 | 3 |
| Fatalities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Night Time | 0 | 1 | 0 | 1 | 0 | 2 | 4 |

Source: Georgia Department of Transportation CARE database, 2001-2005

| Main Street and Whitfield Place | | | | | | | |
|---------------------------------|------|------|------|------|------|------|-------|
| Accident Type | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | TOTAL |
| Head-on / Conflicting Movement | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Sideswipes / Lane Changes | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| Rear Ending | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| Fixed Objects | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 3 | 3 | 0 | 0 | 0 | 0 | 6 |
| | | | | | | | |
| Injuries | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fatalities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Night Time | 0 | 1 | 0 | 0 | 0 | 0 | 1 |

Source: Georgia Department of Transportation CARE database, 2001-2005

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| Main Street and Lewis Street | | | | | | | |
|--------------------------------|------|------|------|------|------|------|-------|
| Accident Type | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | TOTAL |
| Head-on / Conflicting Movement | 0 | 0 | 1 | 1 | 2 | 0 | 4 |
| Sideswipes / Lane Changes | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Rear Ending | 1 | 1 | 0 | 0 | 1 | 0 | 3 |
| Fixed Objects | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1 | 1 | 1 | 2 | 3 | 0 | 8 |
| | | | | | | | |
| Injuries | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fatalities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Night Time | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: Georgia Department of Transportation CARE database, 2001-2005

| Cherokee Street and Big Shanty Rd | | | | | | | |
|-----------------------------------|------|------|------|------|------|------|-------|
| Accident Type | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | TOTAL |
| Head-on / Conflicting Movement | 2 | 1 | 1 | 3 | 3 | 2 | 12 |
| Sideswipes / Lane Changes | 2 | 1 | 0 | 0 | 0 | 1 | 4 |
| Rear Ending | 1 | 0 | 4 | 3 | 3 | 1 | `12 |
| Fixed Objects | 1 | 3 | 1 | 1 | 3 | 0 | 9 |
| Total | 6 | 5 | 6 | 7 | 9 | 4 | 37 |
| Injuries | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fatalities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Night Time | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: Georgia Department of Transportation CARE database, 2001-2005

| Big Shanty Road and Sardis Street | | | | | | | |
|-----------------------------------|------|------|------|------|------|------|-------|
| Accident Type | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | TOTAL |
| Head-on / Conflicting Movement | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Sideswipes / Lane Changes | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Rear Ending | 0 | 2 | 0 | 1 | 1 | 2 | 6 |
| Fixed Objects | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 1 | 2 | 0 | 2 | 2 | 2 | 9 |
| | | | | | | | |
| Injuries | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Fatalities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Night Time | 0 | 0 | 0 | 0 | 1 | 0 | 1 |

Source: Georgia Department of Transportation CARE database, 2001-2005

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14 Implementation Strategy

There are three major elements to the Depot Study Area project implementation: the new Library, the City Park Plaza, and the Transportation Network. Historic Preservation is also very The immediate short-term implementation plans require that meetings be arranged with the utility companies- electrical, gas, cable, phone, water/sewer- to review the Depot Study plans and consider the requirements, challenges and costs associated with locating all utilities underground. In conjunction with this endeavor, additional studies are needed for hydrology (25 acre watershed), wetland delineation (for the intermittent stream south of Community House), and soil boring tests for the field at Big Shanty Road and Sardis Street.

Previous archeology study reports should be reviewed to confirm that all aspects regarding cultural resources have been addressed and the site can been released for development. The historic preservation element is important and is an embedded consideration for all proposed development. Due to the strong level of Cobb County, City and community support for a new Library, emphasis is placed on constructing the Library first (or in conjunction with the Sardis Street extension). As to the remaining Study Area projects and transportation network elements, implementation will largely depend on the attainment of funding. The search and identification of funding sources for all phases should begin immediately. Possible sources identified in Appendix F, Table 33 include, but are not limited to:

- GF- General Fund (City of Kennesaw)
- **TE** Transportation Enhancement (Georgia Department of Transportation, next application due by June 1, 2009),
- **SPLOST** Special Local Option Sales Tax (Cobb County). Anticipated renewal (or equivalent tax) in November 2011.
- LSG- Local or State government department or agency. (i.e. Cobb County)
- **A&E** Arts and/or Educational Grant. Various Sources
- **HP** Historic Preservation Grant. Various Sources.
- **SPG** Special Interest Group (Private or Non-Profit). Groups include KDDA, KBA, and the Civil War Commission
- **CORP** Corporate Grant, Donation, or Sponsorship. Grant Funding or sponsorship from Community-based businesses such banks and retailers.
- **NK** In-Kind land donations. Primarily anticipated with obtaining R.O.W.'s and Easements.

Information pertaining specific grant funding sources and project applicability may be found in Appendix F. Table 11 below provides a summary of project tasks, start dates, completion dates, and possible funding sources.

In Appendix F, two tables are shown that represent proposed 5-year implementation strategies (2008-2013) for all elements presented in the Study. Table 33 presents tasks and subtasks for all Study elements in addition to the funding status, potential funding sources, opinion of costs, and proposed timelines by month and year. Table 34 provides a graphic timeline by month and year for the implementation schedule. The tables are arranged so that new tasks and subtasks may be logically inserted where appropriate. The tables are also structured to

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resemble the City's Short Term Work Program (STWP) format which will assist with annual updates to the STWP.

14.1 Short-term Implementation (0-2 years)

Recently, issues regarding the structural integrity of the Community House were exposed. Since the Community House is a historic structure in a historic district, extreme caution should be exercised in determining its future. A thorough understanding of the options and associated costs is needed. Also, structural analysis will be required for the historic homes that are slated to be shifted out of the Right-of-Way for the Sardis Street Extension Phase II. Contact should be made with the property owners as soon as possible to allow sufficient time for the coordination, analyses, purchase and implementation of the transportation plan.

Finally, coordination of the new Library project, the Sardis Street Extension, and the Big Shanty Road realignment is required. The opportunities and constraints of the two most likely scenarios are provided below. Right-of-Way acquisition and project funding are the critical variables that will ultimately determine the order in which the projects will develop.

Scenario 1: Extend Sardis Street (if only to Cherokee Street) before the Library is constructed:

Opportunities and Constraints:

- The Big Shanty Road and Cherokee Street intersection will close there by improving safety.
- The Big Shanty Road and Sardis Street intersection will be improved for Library traffic.
- The 300-foot section of Big Shanty Road that is closed can be used for Library parking.
- There will be fewer constraints associated with the footprint and site design for the Library.
- Future development of the City Park Plaza and amphitheater should be less challenging.
- Additional property required for parking will be minimized.

Scenario 2: Construct the Library before Sardis Street is extended:

Opportunities and Constraints:

- Big Shanty Road remains open, thereby limiting space available for the Library development.
 This will greatly impact the footprint and site design of the Library.
- The entire property at 2817 Sardis Street will likely be required to meet parking requirements.

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- Additional parking must be incorporated into the city park plaza area (Depot parking lot), temporarily reducing the public green space or as an alternative the Museum Parking Deck will need to be built sooner.
- Temporary intersection improvements at Big Shanty Road/ Cherokee Street and Big Shanty Road/ Sardis Street will be needed until Sardis Street can be extended. This is an inefficient use of resources in addition to creating potential safety issues.
- Future development of the Park Plaza and Amphitheater could be more challenging.

14.2 Mid-Term Implementation (2-3 years)

The mid-term implementation plans should include constructing or completing the Library and associated parking, relocating the CSX Rail spurs down line from their current location near the Depot, developing the Sardis Street Extension Phase II plans, and beginning the detailed design and engineering of the City Park Plaza. By year two, the pedestrian underpass should be completed, and with completion of the Library, a strong link between the Library and underpass will be established. It will be important to begin developing the City Park Plaza elements beginning with the amphitheater components and working northward to the Lacy Hotel and the Plaza. As mentioned above, funding will be the key determinant as to the speed and direction development will take in this intermediate planning and development period.

14.3 Long-Term Implementation (3-5+ years)

By year 3, the Library is expected to be completed, plans for extending Sardis Street to Main Street will be ready to be executed, elements of the City Park Plaza will be designed, engineered and ready for construction, and CSX will have implemented a plan to relocate the rail spurs down line. Additionally, the feasibility of creating, designing, and constructing a New Cherokee Street should be more defined and funding for additional parking or parking decks will have been identified and pursued. The next funding cycle for the Transportation Enhancement (TE) Grant is 2010 and 2011. The expected application due date is June 2009. The TE grant is expected to contribute funding to the proposed projects.

Because of the aggressiveness of a five year implementation plan, it is possible that some of the elements will not be funded according to the preliminary plan and consequently will not be constructed. City needs may also change during this time period. It is important that the City continually update this strategy, document key milestones, and pursue funding sources that will enable the projects to move forward. Additional revisions may also be required to more closely align project schedules with funding source cycles.

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Table 11: Summary of Grant Funding Sources and Project Task Applicability

| Project Task | Opinion of Costs | Anticipated Start | Anticipated | Possible Funding |
|---|--------------------|-------------------|-----------------|---------------------------------------|
| Појесттазк | (2010 costs) | Date | Completion Date | Sources |
| Utility Relocation (Unde | raround) | | | |
| Power | To be Determined | April 2008 | December 2010 | GF, TE |
| Natural Gas | To be Determined | April 2008 | December 2010 | GF, TE |
| Cable | To be Determined | April 2008 | December 2010 | GF, TE |
| Phone | To be Determined | April 2008 | December 2010 | GF, TE |
| Additional Studies | 10 be belefillined | 71pm 2000 | December 2010 | OI, IL |
| Hydrology | To be Determined | April 2008 | December 2008 | GF |
| Wetland Dilineation | To be Determined | April 2008 | December 2008 | GF |
| Soil test (Grass Field) | To be Determined | April 2008 | December 2008 | GF |
| Archeology | To be Determined | April 2008 | December 2008 | GF |
| Community House | To be Determined | April 2008 | December 2008 | GF, TE, HP, A&E, SPG, CORP, LSG |
| Proposed Park Element | S | | | |
| Library and Museum Archives | \$5,040,000 | April 2008 | December 2010 | GF, LSG, TE, SPLOST, A&E, HP, SPG |
| Relocate RR Spurs and Earthen Berm | \$268,000 | April 2008 | June 2012 | GF, TE, SPG, LSG, NK |
| Amphitheater | \$620,000 | April 2008 | June 2012 | GF, TE, A&E, HP, SPG |
| Lacy Hotel | \$280,000 | April 2008 | June 2012 | GF, TE, SPLOST, A&E, HP, SPG, CORP |
| City Park Plaza | \$1,555,000 | April 2008 | June 2012 | GF, SPLOST, TE |
| Road Improvements | | | | |
| R.O.W. Acquisition (for all road improvements) | To be Determined | April 2008 | April 2011 | GF, SPLOST, TE, HP, NK |
| Sardis Street Phase 1 | 1,000,000 | April 2008 | August 2010 | GF, SPLOST, TE, HP |
| Big Shanty Road Realignment | \$300,000 | April 2008 | August 2010 | GF, SPLOST, TE |
| Sardis Street Phase 2 | \$3,750,000 | April 2008 | August 2011 | GF, SPLOST, TE, HP |
| New Cherokee Street Extension | \$2,000,000 | April 2008 | October 2011 | GF, SPLOST, TE |
| Cherokee Street Roundabout | \$200,000 | April 2008 | August 2010 | GF, SPLOST, TE |
| Parking | | | | |
| Parking Lot#1 (Lewis House) | \$200,000 | April 2008 | June 2012 | GF, SPLOST, TE., SPG |
| Parking Lot #2 (rear of 2817 Sardis St. | \$150,000 | April 2008 | June 2012 | GF, SPLOST, TE., SPG |
| Parking Deck #1 Over Parking Lot #2) | \$745,000 | January 2009 | December 2012 | GF, SPLOST, TE., SPG, HP |
| Parking Deck #2 (Museum) | \$1,000,000 | April 2008 | December 2012 | GF, SPLOST, TE., SPG, |

Source: MACTEC Engineering and Consulting

As of 03/12/2008

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As of 03/12/2008

15 Appendices

15.1 APPENDIX A- Figures

As of 03/12/2008

Figure 1: Kennesaw Depot Study Area Boundary

As of 03/12/2008

Figure 2: Future Land Use Map

As of 03/12/2008

Figure 3: Future Development Map

As of 03/12/2008

Figure 4: KDDA and CBD Boundaries

As of 03/12/2008

Figure 5: Zoning Map

As of 03/12/2008

Figure 6: Historic District Map

As of 03/12/2008

Figure 7: Existing Topography

As of 03/12/2008

Figure 8: Soil Survey Map

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Figure 9: Utilities- Above Ground

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Figure 10: Utilities- Below Ground

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Figure 11: Significant Trees and Vegetation

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Figure 12: Big Shanty Road/ Cherokee Street extension 1

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Figure 13: Big Shanty Road/ Cherokee Street extension 2

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Figure 14: Sardis Street Extension 1

Figure 15: Sardis Street Extension 2

Figure 16: Duncan Road Extension

Figure 17: Final Transportation Solution

Figure 18: Depot Concept illustration

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Figure 19: Significant Trees impacted by Sardis Street Extension

Figure 20: Sardis Street Horizontal Alignment with Street Map

Figure 21: Sardis Street Horizontal Alignment with Aerial Map

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Figure 22: Sketch of Lacy Hotel

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Figure 23: Model of Lacy Hotel

Figure 24: Site Cross Sections (To be Added)

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15.2 APPENDIX B- Relationship of Study Area Components to Program Elements

Table 12: Relationship of Current Program Elements to Existing or Proposed Site Components

| | Relo | itionship o | f Program Eleme | ents to Site Com | ponents (Ex | isting or fu | ture.) | | | |
|---|--------|-------------|--------------------|--|----------------------------|--------------|--------------------------|------------------------------|---------------|---------|
| | | E | xisting Site Com | | | | Pro | posed Site Compo | onents | |
| Program Elements | Museum | Depot | Community House | Community Center (Adams Park) | Swift- Cantrell Park | Library | Central Park Plaza | Central Park Amphitheater | Lacy Hotel | Library |
| Current Events | | | | | | | | | | |
| Fairy Time Favorites | | | X | | | Х | | | Х | Х |
| Queen of Hearts Valentine's Exchange | | | х | | | х | | | | х |
| Valentine's Day Dance | | | | X | | | | | | |
| Theater Performances | | | | X | | | X | Х | | |
| Touch a Truck | | | | | | | X | | | |
| Kennesaw Spring Fling(Egg Hunt) | | | | | | | X | | | |
| The Frog Prince's Spring Splash | | | X | | | | | | | |
| Big Shanty Festival | Х | | X | | | | Х | | | |
| Summer Concerts | | | | | Х | | Χ | X | | |
| Movie Under the Stars | | Х | | X | | | Х | | | |
| Pigs and Peaches BBQ Competition | | Х | | X | Х | | Х | | | |
| City -Wide Picnic | | | | X | Х | | X | | | |
| July 4th Fireworks | | Х | | | Х | | X | | | |
| Taste of Kennesaw | | Х | | | | | X | | | |
| Incredible Pumpkin Trail | | | | | Х | | X | | | |
| Lighting of the City Christmas Tree | | Х | | | | | Χ | | Χ | |
| Christmas Parade | | Х | | | | | X | | | |
| Farmers Market | | | | | | | | | | |
| Museum Events | | | | | | | | | | |
| Folk Tales of the Rails | | Х | | | | | X | Х | Х | |
| So You Wanna Be A Civil War | | | | | | | | | | |
| Soldier | X | X | | | | X | Х | X | X | X |
| So You Wanna Be An Engineer | X | X | | | | Х | | | Х | Х |
| All Aboard Days Artilley Weekends(Not limited to | Х | Х | | | | 1 | | | 1 | |
| Civil War Era) | х | | | х | х | | х | x | | |
| Proposed Events | | | | | | | | | | |
| Civil War Re-enactment | | | | | Х | | Х | | Х | |
| Civil War Encampment | Х | | | | Х | | Х | Х | | |
| Shakespeare In The Park | | Х | | | | Х | Х | Х | | Х |

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Table 13: Relationship of Desired Site Amenities to Existing and Proposed Site Components

| | | Relationship o | f Program | Elements to | Existing and P | roposed | Site Compon | ents | | | | |
|---|--------|--------------------|-------------|---------------------------------------|--|---------|-------------|-----------------|--------------------------------------|----------------|----------------------------|---------------|
| | | Exis | ting Site C | omponents | : | | | Prop | osed Site | Compone | ents | |
| Desired Site Amenities | Museum | Community House | Depot | Historic Homes in Study Area | Community Center (Adams Park) | CBD | Library | Central Park | Central Park Amphi- theater | Grand Plaza | Swift- Cantrell Park | Lacy Hotel |
| Conference/ Meeting Rooms | Х | Х | Х | Х | Х | | Х | | | | | Х |
| Continuing Education Classes (single or series) Additional Museum Space(Archive) | х | X X | | x | x | | X X | х | х | | | x |
| | | X | | | | | | | | | | |
| Amphitheater | Х | | | | | | X | Х | X | | Х | |
| Fountain | | | | | | | | Х | | Х | | |
| Plaza | X | | X | | | | X | | Х | Х | | |
| Storytelling Area | Х | Х | Х | Х | Х | | Х | X | Х | Х | | Х |
| Civil War Re-enactment | Х | | Х | | | | | Х | Х | | Х | |
| Visitors Center | X | Х | Х | X | | Х | X | | | | | + |
| Train Viewing Platform | Х | | Х | | | Х | Х | Х | | Х | | Х |
| Snack/ coffee shop | Х | Х | | Х | | Х | Х | Х | | Х | | |
| Picnic Area | Х | Х | | Х | Х | Х | | Х | Х | Х | Х | |
| Children's Garden | | Х | | Х | | | Х | Х | | | | |
| Playground | | Х | | | | | | Х | | Х | | |
| Bus Parking | Х | | | | Х | Х | X | | | | | |
| Library Parking | | | Х | | | Х | Х | | | Х | | |
| Museum Parking | Х | | Х | | | Х | Х | | | Х | | |
| Public/ Events Parking | Х | | Х | | Х | Х | Х | | | Х | Х | |

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15.3 APPENDIX C- Opinion of Probable Costs

The following tables contain Opinions of Probable Costs and budgeting-level Cost Projections through 2015, which are provided based on MACTEC's judgment as experienced professionals generally familiar with the components of site development. Project elements and estimated quantities were derived from the Concept Illustration for Study Area. Unit cost values have been determined by referencing several sources including, but not limited to, current City and Cobb County projects, previous and current MACTEC projects, and values available from published cost estimating documents such as RS Means. Since quantities are estimated based on a master plan-level illustration only and not detailed engineering drawings, the quantities and unit costs should only be considered preliminary. Budgets, bids and actual construction costs may vary significantly from the values presented below.

To assist in planning, MACTEC has included incremental cost projections through year 2015. The cost projections are based on the "2007 base year" opinion of probable costs in addition to an average annual inflation rate of 3.5%. The average annual inflation rate was derived from the highest average annual rate between 1996-2006 and rounded to next highest quarter point value. (3.39% in 2005). In addition, costs will increase for LEED certified projects and project elements.

15.3.1 Utility Relocation and Improvements

Due to the complex nature of relocating aboveground utilities underground, a planning level opinion of cost will require additional detailed analysis and coordination with all utility providers with existing aboveground and underground equipment and lines. Complicating the endeavor are the costs associated with temporarily closing sections of roadway and interrupting service during the transition. Extensive coordination is required among the City's Public Work's Department, Police Department, and the utility equipment/ service providers.

Opinions of cost for additions and modifications to existing overhead utilities for the construction of the Library, Sardis Street Extension, or Big Shanty re-alignment should be made available during the initial design phases for the particular project element.

As of 03/12/2008

15.3.2 Library

The figures used to calculate the opinion of probable cost for the Library were derived from publicly available information for the South Cobb Regional Library that was designed and constructed between 2003 and 2006. The unit price calculations for the current 2007 year were determined based on the 2003 construction estimate of \$3.7 million for a 15,000 square foot facility and an annual inflation rate of 3.5%. The 2003 (probable cost) figure shown below has been adjusted to reflect the probable cost of the 15,000 sq. ft. facility.

The Library cost estimate includes 20,000 square feet of floor space, 112 parking spaces, 57,000 square feet of parking area, and 6,400 square feet of sidewalks immediately adjacent to the structure.

Table 14: Opinion of Probable Cost associated with New Library Construction

| Table 14. Opinion of | Hobabic Cosi | | WIIII INCW | Library Con | JII O C II O I I | | | | |
|---------------------------------------|----------------|-------------|---|-------------------------------|-------------------------------|-------------------------------|--|--|--|
| | Average | 2003 | С | ost Projection (| or Specified Ye | ear | | | |
| | Annual | (probable | | | | | | | |
| Description | Inflation Rate | cost) | 2007 | 2008 | 2010 | 2015 | | | |
| Library building | 3.50% | \$2,775,000 | \$4,540,000 | \$4,700,000 | \$5,040,000 | \$5,980,000 | | | |
| Unit pricing (based on sq ft of bldg) | 3.50% | \$185 | \$227 | \$235 | \$252 | \$299 | | | |
| Includes: | | | | | | | | | |
| Description | Measurement | Unit | 2007 Unit Price (sq ft) | 2008 Unit Price (sq ft) | 2010 Unit Price (sq ft) | 2015 Unit Price (sq ft) | | | |
| Building | 20,000 | sq ft | \$227 | \$235 | \$252 | \$299 | | | |
| Parking | 57,000 | sq ft | | | | | | | |
| Sidewalks | 6,400 | sq ft | | | | | | | |
| Land Acquisition | ALL | | | | | | | | |
| Utilities | ALL | | Included with building square footage pricing | | | | | | |
| Landscaping | ALL | | | | | | | | |
| Design | ALL | | | | | | | | |

Source: MACTEC Engineering and Consulting

Prepared by: David Hardegree

Checked by: Ron Huffman, ASLA, Principal, Glenn Coffman, PE, Principal

As of 03/12/2008

15.3.3 Park Plaza

Table 15: Opinion of Probable Cost associated with Park Plaza Elements

| | | | | | | С | ost Projection (| or Specified Ye | ear |
|--|----------------|-----------|----------------|------------------------|-------------------|-------------|------------------|-----------------|-------------|
| | Dim | ensions | Total | Unit | | | · | | |
| Description | Length (ft) | Width(ft) | Area(sq ft) | price (\$/sq ft) | Inflation Rate | 2007 | 2008 | 2010 | 2015 |
| Concession or Restroom Structures | | | | | | | | | |
| (Quantity = 2) | 60 | 15 | 900 | 250 | 3.5 | \$225,000 | \$232,875 | \$249,462 | \$296,282 |
| Sidewalk- concrete | 1,200 | 20 | 24,000 | 9 | 3.5 | \$216,000 | \$223,560 | \$239,483 | \$284,431 |
| Sidewalk- pavers | 1,000 | 20 | 20,000 | 12 | 3.5 | \$240,000 | \$248,400 | \$266,092 | \$316,034 |
| Amenities- Benches, trash receptacles Grading and | Allo | wance | | | 3.5 | \$171,000 | \$176,985 | \$189,591 | \$225,174 |
| Drainage | Allo | wance | | | 3.5 | \$100,000 | \$103,500 | \$110,872 | \$131,681 |
| Utilities | Allo | wance | | | 3.5 | \$50,000 | \$51,750 | \$55,436 | \$65,840 |
| Lighting | Allo | wance | | | 3.5 | \$90,000 | \$93,150 | \$114,770 | \$136,311 |
| Playground Equipment (2-5 yrs) | Allo | wance | | | 3.5 | \$25,000 | \$25,875 | \$31,881 | \$37,864 |
| Lawn Areas | | | 20,000 | 10 | 3.5 | \$200,000 | \$207,000 | \$221,744 | \$263,362 |
| Landscaping (trees and shrubs only) | Allo | wance | | | 3.5 | \$50,000 | \$51,750 | \$55,436 | \$65,840 |
| | | | | | Totals | \$1,367,000 | \$1,414,845 | \$1,534,765 | \$1,822,820 |

Source: MACTEC Engineering and Consulting

Prepared by: David Hardegree

Checked by: Ron Huffman, ASLA, Principal, Glenn Coffman, PE, Principal

The sidewalk- concrete unit cost includes \$3 per square foot for removal of the existing asphalt driveway and parking area.

15.3.4 Lacy Hotel

The opinion of probable cost shown below is based on market averages for basic, new wood construction. Amenities such as furnishings and decor, sound, communication, fire suppression, lighting and security systems are not included.

Table 16: Opinion of Probable Cost associated with the Lacy Hotel Replica

| | | | | Average | Cost | Projection fo | or Specified | Year |
|--------|-----------|------------------|------------------------|---------------------|-----------|----------------------|--------------|-----------|
| Dim | ensions | | L | | | | | |
| Length | | Total Area(sq | Estimated Unit Cost | Annual Inflation | | | | |
| (ff) | Width(ft) | ft) | (\$/sq ft) | Rate | 2007 | 2008 | 2010 | 2015 |
| 60 | 28 | 1680 | \$150 | 3.5% | \$252,000 | \$260,820 | \$279,397 | \$331,836 |

Source: MACTEC Engineering and Consulting

Prepared by: David Hardegree

Checked by: Ron Huffman, ASLA, Principal, Glenn Coffman, PE, Principal

As of 03/12/2008

15.3.5 Amphitheater

The opinion of probable cost for an Amphitheater or enhanced greenspace referenced below omits costs for stormwater collection and utility additions or relocation. The referenced "Structure" is intended to be a basic structure perhaps incorporating late 1800's period architecture. The structure may potentially double as a small performing arts or concert stage.

Table 17: Opinion of Probable Costs associated with Basic Elements for an Amphitheater

| | | | | | | Co | st Projection | for Specified Ye | ear |
|---|----------------|-----------|----------------|---------------------|-------------------|-----------|---------------|------------------|-----------|
| | Dime | nsions | Total | Unit | | | | | |
| Description | Length (ft) | Width(ft) | Area(sq ft) | price (\$/sq ft) | Inflation Rate | 2007 | 2008 | 2010 | 2015 |
| Stage Structure | 40 | 20 | 800 | 150 | 3.5 | \$120,000 | \$124,200 | \$133,046 | \$158,017 |
| Viewing Area (lawn) | 160 | 150 | 24000 | 10 | 3.5 | \$240,000 | \$248,400 | \$266,092 | \$316,034 |
| Landscaping (trees and shrubs only) | | Allow | ance | | 3.5 | \$20,000 | \$20,700 | \$22,174 | \$26,336 |
| Benches and trash receptacles (edges only) | Allowance | | | | 3.5 | \$31,000 | \$32,085 | \$34,370 | \$40,821 |
| Lighting (edges only) | | Allowance | | | | \$16,000 | \$16,560 | \$17,739 | \$21,069 |
| Grading and Drainage | Allowance | | | | 3.5 | \$100,000 | \$103,500 | \$110,872 | \$131,681 |
| Utilities | | Allow | ance | | 3.5 | \$30,000 | \$31,050 | \$33,262 | \$39,504 |
| | _ | _ | _ | _ | Totals | \$557,000 | \$576,495 | \$617,556 | \$733,463 |

Source: MACTEC Engineering and Consulting

Prepared by: David Hardegree

Checked by: Ron Huffman, ASLA, Principal, Glenn Coffman, PE, Principal

As of 03/12/2008

15.3.6 Earthen Berm

The earthen berm is intended to be constructed between the amphitheater and rail lines over much of the area currently occupied by the two rail spurs. The berm will serve to mitigate sound, provide an area for train viewing, and define the western boundary of the park. A cubic yard unit price for fill dirt is shown as \$20/ yd. The price range for dirt may lie between \$8-\$25 per cubic yard depending on market conditions.

Table 18: Opinion of Probable Costs associated with Earth Berm Construction

| | | Dimens | ons and C | alculations | | | Со | st Projection (| for Specified | Year |
|-------------------------------------|----------------|---------------|----------------|--------------------|--------------------------------|-------------------|-----------|-----------------|---------------|-----------|
| Description | Length (ft) | Widt h(ft) | Height (ft) | Volume (cu yds) | Unit price (\$/cu yd) | Inflation Rate | 2007 | 2008 | 2010 | 2015 |
| Earthen Berm | 460 | 30 | 10 | 5,111 | \$20 | 3.5 | \$102,222 | \$105,800 | \$113,336 | \$134,607 |
| Landscaping (trees and shrubs only) | | Allowance | | | | | \$20,000 | \$20,700 | \$22,174 | \$26,336 |
| Benches and trash receptacles | | | Allowand | ce | | 3.5 | \$23,000 | \$23,805 | \$25,501 | \$30,287 |
| Lighting | | | Allowand | ce | | 3.5 | \$21,000 | \$21,735 | \$23,283 | \$27,653 |
| Grading and Drainage | | Allowance | | | | | \$50,000 | \$51,750 | \$55,436 | \$65,840 |
| Utilities | | Allowance | | | | | \$25,000 | \$25,875 | \$27,718 | \$32,920 |
| _ | | · | | | | Totals | \$241,222 | \$249,665 | \$267,447 | \$317.644 |

Source: MACTEC Engineering and Consulting

Prepared by: David Hardegree

Checked by: Ron Huffman, ASLA, Principal

As of 03/12/2008

15.3.7 Welcome Center (structure relocation)

Due to the complex nature of relocating a historic structure in disrepair, an opinion of probable cost can not be provided prior to a detailed technical evaluation of the structure. Below are some guidelines to consider when relocating a structure that will affect costs:

- 1. How big is the structure? Smaller structures are typically easier and cheaper to move.
- 2. How far is the structure being moved? The short move required per the Concept illustration may not meet minimum requirements for some contractors.
- 3. Moving a structure will place tremendous strain on the floor joists and frame of the house. Preparation will likely be needed to strengthen the structure.
- 4. If City staff is unable to prepare the structure for the move, contractors will be required to perform the necessary preparation such as removing windows, doors, drywall, etc.
- 5. Utility companies will likely be involved so there may be fees associated with these services.
- 6. What are the liability and insurance ramifications to the City of relocating and improving the structure? Excepts from (http://www.mortgagenewsdaily.com/wiki/Move House.asp)

Additional information may be obtained from the International Association of Structural Movers, http://www.iasm.org/index.html.

15.3.8 Wetland Delineation

A summary report of jurisdictional waters determination has been included in Appendix D. The report provides precursory information. Additional delineation, mapping, and permitting will be required. It is important to coordinate this activity with the City's Environmental Specialist.

15.3.9 Stormwater Retention/ Detention

Stormwater is another complex issue for the Study Area. Stormwater retention/ detention requirements could easily be determined for only the 5-acre site. The complexity occurs because the 5-acre site contains the lowest point for an approximate 25-acre watershed. Much of the water collected from Shirley Drive, Big Shanty Road, and Cherokee Street will travel at a high velocity onto the site because of the 8% slope along Cherokee Street. Energy dissipation solutions will likely be needed in addition to determining if storage should occur in a pond or underground. Each solution will influence detailed project design. A hydrology study is required to fully understand the impact stormwater from the entire watershed will have on design solutions and associated costs.

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15.3.10 Transportation Improvements Opinion of Probable Costs

The following tables present opinions of probable costs as determined by the project calculations page on the website for the Georgia Department of Transportation (GDOT). The intent of these cost estimates is to provide planning level projections to be used to identify priorities and funding sources until detailed engineering drawings can be developed to allow more accurate cost-estimates. The cost estimates were generated by GDOT using unit price construction costs in their database and information provided by MACTEC such as quantities (Qty).

Appendix C, Table 18 presents general and projected costs by components associated with all aspects of the proposed major transportation projects. Table 19 presents a detailed summary of the opinion of probable costs for three identified phases and specific roadways.

As of 03/12/2008

Table 19: Opinion Of Probable Costs for Transportation Improvements by Component

| | Section Co | Cost Projection for Specified Year | | | | | | | | | |
|------------|--|------------------------------------|---------|---------------|--|-------------|-------------|-------------|-------------|--|--|
| Item No. | Item Decription | Qty | Unit | 2007 Unit | Average Annual Inflation Rate (%) | 2007 | 2008 | 2010 | 2015 | | |
| 150-1000 | Traffic Control | Qiy 1 | LS | | 3.5 | \$150,000 | \$155,250 | \$166,308 | \$197,521 | | |
| | | 1 | | \$150,000 | | | | | | | |
| 163-xxxx | Erosion Control | | LS | \$100,000 | 3.5 | \$100,000 | \$103,500 | \$110,872 | \$131,681 | | |
| 202-2100 | Clearing |] | LS | \$100,000 | 3.5 | \$100,000 | \$103,500 | \$110,872 | \$131,681 | | |
| 210-0100 | Grading Complete | 1 | LS | \$100,000 | 3.5 | \$100,000 | \$103,500 | \$110,872 | \$131,681 | | |
| 310-1101 | Gr Aggr base crs, incl matl | 30,000 | TN | \$25 | 3.5 | \$750,000 | \$776,250 | \$831,538 | \$987,607 | | |
| 402-3113 | Recycled asph conc 12.5 mm superpave, gp1 or 2, incl bitum matl & h lime | 13,500 | TN | \$95 | 3.5 | \$1,282,500 | \$1,327,388 | \$1,421,931 | \$1,688,808 | | |
| 441-0104 | Conc sidewalk,4in. | 13,000 | SY | \$35 | 3.5 | \$455,000 | \$470,925 | \$504,467 | \$599,148 | | |
| 441-6022 | Conc Curb and Gutter, 6in x 30in typ 2 | 15,000 | LF | \$20 | 3.5 | \$300,000 | \$310,500 | \$332,615 | \$395,043 | | |
| * 500-xxx1 | Bridge over CSX RR | 7,200 | SF | \$110 | 3.5 | \$792,000 | \$819,720 | \$878,105 | \$1,042,913 | | |
| 500-xxx2 | Concrete Retaining Walls | 1 | LS | \$50,000 | 3.5 | \$50,000 | \$51,750 | \$55,436 | \$65,840 | | |
| 550-xxxx | Roadway Drainage | 1 | LS | \$500,000 | 3.5 | \$500,000 | \$517,500 | \$554,359 | \$658,405 | | |
| 647-1000 | Traffic Signal Installation- Moon Station Rd and Sardis St. Extension | 1 | LS | \$125,000 | 3.5 | \$125,000 | \$129,375 | \$138,590 | \$164,601 | | |
| 647-1000 | Traffic Signal Installation- Cherokee St.and Sardis St. Extension | 1 | LS | \$125,000 | 3.5 | \$125,000 | \$129,375 | \$138,590 | \$164,601 | | |
| 647-1000 | Traffic Signal Modification- Main St.and Sardis St. | 1 | LS | \$50,000 | 3.5 | \$50,000 | \$51,750 | \$55,436 | \$65,840 | | |
| 653-xxxx | Pavement marking and Signing | 1 | LS | \$50,000 | 3.5 | \$50,000 | \$51,750 | \$55,436 | \$55,436 | | |
| 700-xxx | Grassing/Turf | 1 | LS | \$50,000 | 3.5 | \$50,000 | \$51,750 | \$55,436 | \$55,436 | | |
| | | | | | | | | | | | |
| | Section Sub Total \$4,979,500 \$5,153,783 \$5,520,861 \$6,536,241 | | | | | | | | | | |
| | | Engineer Continge | | Construction | | \$1,244,875 | \$1,288,446 | \$1,380,215 | \$1,634,060 | | |
| | Carrie Describe | E | stimate | d Total Const | ruction Costs | \$6,224,375 | \$6,442,228 | \$6,901,076 | \$8,170,302 | | |

Source: Georgia Department of Transportation. MACTEC Engineering and Consulting.

Prepared by: George Obaranec and David Hardegree Checked by: Paul Mullins, Senior Principal * in review

For Table 19, the cost of each phase was determined by calculating the percentage of roadway and major bridge components that each phase comprised of the total length of roadway additions. The summary does include a 25 percent contingency for engineering and construction costs.

^{*} Represents Major Bridge Overpass Components.

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Table 20: Opinion of Probable Costs: Detail Summary of Transportation Improvements by Road

| · | | % of | Estimat | ed Cost projec | ction for Speci | ic Year |
|--|--------------------------------|------------------------------|-------------|----------------|-----------------|-------------|
| Description | Length of Roadway (L.F.) | Overall Linear Footage | 2007 | 2008 | 2010 | 2015 |
| Phase I- Sardis Street Extension to New Cherokee Street. Includes Big Shanty Rd. Realignment | 2,545 | 35% | \$1,808,756 | \$1,872,062 | \$2,005,400 | \$2,372,797 |
| Sardis St from S Main St. to Big Shanty Rd. | 1,265 | 50% | \$899,047 | \$930,514 | \$996,790 | \$1,179,406 |
| Sardis St. from Big Shanty to Cherokee St. | 520 | 20% | \$369,569 | \$382,504 | \$409,748 | \$484,815 |
| Sardis St. from Cherokee St. to New Cherokee St. | 410 | 16% | \$291,391 | \$301,590 | \$323,070 | \$382,258 |
| Big Shanty Road Realignment | 350 | 14% | \$248,748 | \$257,454 | \$275,792 | \$326,318 |
| Phase II- Sardis St. Extension from New Cherokee Street to Main Street, includes new Main Street/ Moon Station Road intersection and new overpass | 1,960 | 26% | \$1,392,990 | \$1,441,745 | \$1,544,433 | \$1,827,380 |
| New Bridge (major components) | | | \$990,000 | \$1,024,650 | \$1,097,631 | \$1,303,641 |
| Sardis St. Extension from New Cherokee St. to Moon Station Rd. (Does not include new bridge) | 660 | 34% | \$469,068 | \$485,486 | \$520,064 | \$615,342 |
| Whitfield PI./ North Main St. from Moon Station to Dallas Street | 760 | 39% | \$540,139 | \$559,044 | \$598,862 | \$708,576 |
| Moon Station Rd realignment from Whitfield Pl. to Main Street | 420 | 21% | \$298,498 | \$308,945 | \$330,950 | \$391,581 |
| Lewis St. realignment at Main St. | 120 | 6% | \$85,285 | \$88,270 | \$94,557 | \$111,880 |
| Phase III- New Cherokee St. Extension and Sardis Street. connection | 2,860 | 39% | \$2,032,629 | \$2,103,771 | \$2,253,612 | \$2,666,483 |
| New Cherokee St. | 1760 | 62% | \$1,250,849 | \$1,294,628 | \$1,386,838 | \$1,640,913 |
| Old Cherokee St. realignment at new Cherokee St. | 160 | 6% | \$113,714 | \$117,693 | \$126,076 | \$149,174 |
| Cherokee Ridge Trail Extension | 480 | 17% | \$341,141 | \$353,080 | \$378,229 | \$447,522 |
| Shirley St. Realignment at Sardis St. Extension near Museum Parking Lot | 160 | 6% | \$113,714 | \$117,693 | \$126,076 | \$149,174 |
| Carruth Street improvements at New Cherokee St. | 200 | 7% | \$142,142 | \$147,117 | \$157,595 | \$186,467 |
| Shirley Dr cul-de-sac at New Cherokee St. | 100 | 3% | \$71,071 | \$73,558 | \$78,798 | \$93,234 |
| Total Length (If) and Opinion of Probable Costs for All Roadway Additions | 7,365 | 100% | \$6,224,375 | \$6,442,228 | \$6,901,076 | \$8,170,302 |

Source: Georgia Department of Transportation. MACTEC Engineering and Consulting.

Prepared by: George Obaranec and David Hardegree Checked by: Paul Mullins, Senior Principal * in review

^{*} Please note that costs associated with Right-of-Way acquisition and Utility additions, removals and modifications have not been included with the Opinion of Probable Costs. These two items will have to be determined in order to attain a more complete opinion of costs.

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15.3.11 Urban Roundabout

Table 21 below provides opinions of probable cost for constructing the Urban Roundabout and associated elements. The Estimated Cost calculation in each table omits costs for stormwater collection and utility/ structure relocation.

Table 21: Opinion of Probable Costs associated with Construction of an Urban Roundabout

| | | | | | | Cost | Projection fo | or Specified \ | rear ear |
|-------------------------------------|----------------|-----------|--------------------|----------------------------|-------------------|-----------|---------------|----------------|-----------|
| | Dime | nsions | Total | | | | | | |
| Description | Length (ft) | Width(ff) | Area (sq ft) | Unit price (sq. ft.) | Inflation Rate | 2007 | 2008 | 2010 | 2015 |
| Roundabout Surface area | | | | | | | | | |
| (New pavement) | 350 | 24 | 8,400 | \$12 | 3.5 | \$100,800 | \$104,328 | \$111,759 | \$132,734 |
| Curb and Gutter | 660 | 6" x 24" | 660 | \$17(If) | 3.5 | \$11,220 | \$11,613 | \$12,440 | \$14,775 |
| Sidewalk- concrete | 290 | 5 | 1,450 | \$9 | 3.5 | \$13,050 | \$13,507 | \$14,469 | \$17,184 |
| Sidewalk- pavers | 125 | 8 | 1,000 | \$12 | 3.5 | \$12,000 | \$12,420 | \$13,305 | \$15,802 |
| Grass Area | | | 1,000 | \$8 | 3.5 | \$8,000 | \$8,280 | \$8,870 | \$10,534 |
| Fountain/Statuary | Allov | vance | | | 3.5 | \$20,000 | \$20,700 | \$22,174 | \$26,336 |
| Landscaping (trees and shrubs only) | Allov | vance | | | 3.5 | \$10,000 | \$10,350 | \$11,087 | \$13,168 |
| | | | | | Totals | \$175,070 | \$181,197 | \$194,103 | \$230,534 |

Source: MACTEC Engineering and Consulting

Prepared by: David Hardegree

Checked by: George Obaranec. Paul Mullins, Senior Principal * in review

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15.3.12 Parking

Table 22 below provides opinions of cost for constructing two basic parking areas in the Study Area. Table 23 provides opinions of cost associated with constructing standard, basic parking decks in two identified parking areas. The current range for constructing a parking deck is \$12,000 to \$20,000 per parking space depending on the design and detail of the facade. The Cost Projection calculation in each table omits costs for land acquisition, stormwater collection and utility/ structure relocation. The calculations include grading, the addition of curb and gutter, base courses, top and finish coats, striping and signage.

Table 22: Opinion of Probable Cost associated with Constructing Parking Areas without Decks

| | | | | | Cost Estimate for Specific Year | | | | | |
|--|-----------------|------------------|----------------------|---------------------------------|---------------------------------|-----------|-----------|-----------|--|--|
| Location | Size (sq ft) | No. of Spaces | Unit Cost (sf) | Annual Inflation Rate (%) | 2007 | 2008 | 2010 | 2015 | | |
| North of Library behind Lewis House | 13,500 | 30 | \$12 | 3.5 | \$162,000 | \$167,670 | \$179,612 | \$213,323 | | |
| Curb and Gutter | 590 | | \$17(If) | 3.5 | \$10,030 | \$10,381 | \$11,120 | \$13,208 | | |
| | | | | Subtotal | \$172,030 | \$178,051 | \$190,733 | \$226,531 | | |
| Rear of parcel. 2817 Sardis Street | 9750 | 28 | \$12 | 3.5 | \$117,000 | \$121,095 | \$129,720 | \$154,067 | | |
| Curb and Gutter | 505 | | \$17(If) | 3.5 | \$8,585 | \$8,885 | \$9,518 | \$11,305 | | |
| | | | | Subtotal | \$125,585 | \$129,980 | \$139,238 | \$165,371 | | |
| Existing Museum Parking | 30,000 | 78 | | | | | | - | | |
| Existing Museum Parking - Front | 4,000 | 7 | | | | | | | | |

Source: MACTEC Engineering and Consulting

Prepared by: David Hardegree

Checked by: George Obaranec, Paul Mullins, Senior Principal * in review

Table 23: Opinion of Probable Cost associated with Constructing Parking Areas with Decks

| · | | | | Average | Cost Projection for Specified Year | | | | | |
|----------------------|-----------------|------------------|-----------------------------|-----------------------------|------------------------------------|-----------|-------------|-------------|--|--|
| Location | Size (sq ft) | No. of Spaces | Unit Cost (per space) | Annual Inflation Rate | 2007 | 2008 | 2010 | 2015 | | |
| Rear of parcel. 2817 | | | | | | | | | | |
| Sardis Street | 9,750 | 56 | \$12,000 | 3.5% | \$672,000 | \$695,520 | \$745,058 | \$884,896 | | |
| Museum Parking | | | | | | | | | | |
| Deck(conc) | 30,000 | 78 | \$12,000 | 3.5% | \$936,000 | \$968,760 | \$1,037,760 | \$1,232,533 | | |

Source: MACTEC Engineering and Consulting

Prepared by: David Hardegree

Checked by: George Obaranec, Paul Mullins, Senior Principal * in review

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Table 24: Opinion of Costs- Project Summary Total

| Table 24: Opinion of C | · · | ost Projection for | Specific Year | | |
|--|---------------------|----------------------|---|-------------------|---------------------------------|
| Description | 2007 | 2008 | 2010 | 2015 | Potential Funding Source |
| Description | 2007 | 2000 | 2010 | 2013 | r ofciliar rollaring sociec |
| CSX Underpass- Wall | | | | | GF, TE, SPLOST, A&E, HP, |
| Panel Details | \$0 | \$30,000 | \$0 | \$0 | SPG |
| Library and Museum | · · | , | · | , | GF, LSG, TE, SPLOST, A&E, |
| Archives | \$4,540,000 | \$4,700,000 | \$5,040,000 | \$5,980,000 | HP, SPG |
| 011 5 1 51 | 41.0.47.000 | 41.41.4.0.45 | 41.504.745 | 4. 000 000 | GF, SPLOST, TE, HP, LSG, |
| City Park Plaza | \$1,367,000 | \$1,414,845 | \$1,534,765 | \$1,822,820 | SPG GF, TE, SPLOST, A&E, HP, |
| Lacy Hotel (Replica) | \$252,000 | \$260,820 | \$279,397 | \$331,836 | SPG, CORP |
| Amphitheater | \$557,000 | \$576,495 | \$617,556 | \$733,463 | GF, TE, A&E, HP, SPG |
| Berm (does not | \$337,000 | \$ 3/ 6,473 | \$617,336 | \$733,463 | GF, IE, A&E, HF, 3FG |
| include cost of spur | | | | | GF, TE, SPG, LSG, NK |
| relocation) | \$241,222 | \$249,665 | \$267,447 | \$317,644 | , , , , |
| | | | | | |
| Parking Lot Total | \$297,615 | \$308,032 | \$329,971 | \$391,902 | GF, SPLOST, TE, LSG, NK |
| Parking Lot- North of | | · | | · | |
| Library behind Lewis | 4 | | | | |
| House | \$172,030 | \$178,051 | \$190,733 | \$226,531 | |
| Parking Lot- Rear of parcel. 2817 Sardis | | | | | |
| Street | \$125,585 | \$129,980 | \$139,238 | \$165,371 | |
| Parking Deck Total | \$1,608,000 | \$1,664,280 | \$1,782,818 | \$2,117,429 | GF, SPLOST, TE, SPG, LSG |
| Parking Deck-Rear of | Ψ.//σσσ/σσσ | 4 1/22 1/22 | 4 · //· 5 = / 5 · 5 | +-/ | |
| parcel. 2817 Sardis | | | | | |
| Street | \$672,000 | \$695,520 | \$745,058 | \$884,896 | |
| Parking Deck- | | | | | |
| Museum Parking Deck(conc) | \$936,000 | \$968,760 | \$1,037,760 | \$1,232,533 | |
| Cherokee Street | Ψ700,000 | Ψ/00,/00 | ψ1,007,700 | Ψ1,202,000 | |
| Roundabout | \$175,070 | \$181,197 | \$194,103 | \$230,534 | GF, SPLOST, TE, NK |
| Opinion of Probable | | | | | |
| Costs for All | # 4 00 4 075 | * / / / 0 000 | ¢ / 001 07 / | #0.170.000 | OF CRICOT TE LIB NIK |
| Roadway Additions Phase I- Sardis St | \$6,224,375 | \$6,442,228 | \$6,901,076 | \$8,170,302 | GF, SPLOST, TE, HP, NK |
| Extension to New | | | | | |
| Cherokee St. | \$1,808,756 | \$1,872,062 | \$2,005,400 | \$2,372,797 | |
| Phase II- Sardis St. | | | | , , , , , , | |
| Extension from New | | | | | |
| Cherokee Street to | | | | | |
| Main Street, includes new Main Street/ | | | | | |
| Moon Station Road | | | | | |
| intersection and new | | | | | |
| overpass | \$1,392,990 | \$1,441,745 | \$1,544,433 | \$1,827,380 | |
| Phase III- New | | | | | |
| Cherokee St. Extension and Sardis | | | | | |
| Street. Connection | \$2,032,629 | \$2,103,771 | \$2,253,612 | \$2,666,483 | |
| 2001, 001.110011011 | 4-10021021 | Ψ=/.00/// | Ψ-/ | 4-,000,100 | |
| Takala | 615.040.000 | 615 007 540 | 61/ 047 104 | £00 005 000 | |
| Totals | \$15,262,282 | \$15,827,562 | \$16,947,134 | \$20,095,929 | |

Funding Sources:

GF- General Fund, **TE**- Transportation Enhancement, **SPLOST**- Special Local Option Sales Tax or equivalent tax, **LSG**- Local or State Government, **A&E**- Arts and/or Educational Grant, **HP**- Historic Preservation Grant, **SPG**- Special Interest Group (Private or Non-Profit), **CORP**- Corporate Grant or Sponsorship, **NK**- In-Kind (primarily expected for ROW's or Easements)

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15.4 APPENDIX D- Summary Report of Jurisdictional Waters

Project Area Description

MACTEC personnel visited the project site on September 7, 2007. The subject property is located north and east of Main Street and the CSX Railroad, south of Cherokee Street, and west of Sardis Street in Kennesaw, Georgia. The approximately 5.2-acre site is a partially wooded city park. A site location map is included as Figure 1. Site topography is mainly dominated by uplands and a drainage feature that flows across the central portion of the subject property. The objective of the site visit was to evaluate the potential presence of jurisdictional waters of the U.S. and Georgia, including wetlands and perennial, intermittent, and ephemeral streams, within the boundaries of the subject property.

Methods

<u>Jurisdictional Waters Determination</u>

MACTEC performed a determination of jurisdictional waters on the subject property using a combination of in-house research (desktop study) and a brief field investigation. MACTEC is defining a "determination" as an assessment as to whether or not jurisdictional waters are present (i.e., yes they are present or no they are not present). The approximate extent of jurisdictional areas within the project site was evaluated using the United States Geological Survey (USGS) digital 7.5' topographic map (Kennesaw, Georgia quadrangle, as shown on Figure 2), the associated U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) Map (Figure 3), and the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Map (Soil Survey of Cobb County, Georgia, 1973, Figure 4).

Subsequent to the in-house review, MACTEC personnel visited the project site in order to make a preliminary assessment of the presence of jurisdictional waters and to refine the scope of work needed for a delineation of jurisdictional waters and wetlands at a later date, if required. A "delineation" (i.e., to indicate or represent by drawn or surveyed lines or to mark the outline of) is defined as a determination and the delineation in the field which is marked with survey flagging which can be used subsequently for the survey location and mapping of the field boundaries of these jurisdictional waters.

Jurisdictional waters of the United States, including streams and wetlands, are defined by 33 CFR Part 328.3 and are protected by Section 404 of the Clean Water Act (33 USC 1344). Impacts to these regulated resources are administered and enforced by the U.S. Army Corps of Engineers (USACE), Savannah District. Impacts to jurisdictional waters from the proposed project would fall under Section 404 of the Clean Water Act. Jurisdictional waters within the subject property need to be delineated according to standards set forth in the March 12, 2007 Federal Register documentation regarding jurisdictional waters, which included mandates regarding perennial, intermittent, and ephemeral streams, and wetlands.

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The State of Georgia (State) restricts land-disturbing activities within 25 feet of the banks of State waters, as measured from the point where vegetation has been wrested by normal stream flow. This provision is

set forth in the Official Code of Georgia Annotated (O.C.G.A 12-7-1 et seq.) and is a component of the Georgia Erosion and Sedimentation Act of 1975 (Act) (as amended through 2003). This provision falls under the jurisdiction of the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources (GDNR), but certain local municipalities and authorities are certified as Local Issuing Authorities (LIAs) pursuant to Subsection (a) of Code Section 12-7-8 of the Act. These LIAs have enacted ordinances that meet or exceed the standards, requirements, and provisions set forth in the Act and are enforceable by such issuing authorities. The City of Kennesaw is a designated LIA.

Project Area Habitats

The proposed project is located approximately 27 miles north-northwest of Atlanta, Georgia, within the City of Kennesaw in Cobb County. The proposed project is located northeast of Main Street and the CSX Railroad, south of Cherokee Street, and west of Sardis Street in Kennesaw, Georgia (Figure 1). The project area consists mainly of uplands (Figure 2). Slopes range from two to ten percent in the upland areas. Elevations range from 1085 to 1098 feet above mean sea level.

Habitat within and adjacent to the project area consists of single and multi-family residential, mixed hardwood forest, and maintained park activity areas and mowed lawns. Overstory species in the wooded areas of the property include red maple (Acer rubrum), sweetgum (Liquidambar styraciflua), sycamore (Platanus occidentalis), pecan (Carya illinoiensis), red mulberry (Morus rubra), and black willow (Salix nigra). Subcanopy and understory species include saplings of overstory species and black locust (Robinia pseudoacacia), eastern cottonwood (Populus deltoides), eastern redcedar (Juniperus virginiana), slippery elm (Ulmus rubra), Chinese privet (Ligustrum sinense), poison ivy (Toxicodendron radicans), blackberry (Rubus sp.), giant ironweed (Verononia gigantea), rushes (Scirpus spp.), and sedges (Carex spp.).

Results

Jurisdictional Waters Determination

The project site and vicinity are shown on Figure 1(pg 102). There is a drainage feature within the central portion of the proposed project site. The USGS topographic quadrangle map does not depict the stream that is present on the project site (Figure 2) (pg 103).

The NWI map of the project area is shown on Figure 3(pg 104). In-house review of the USDA-NRCS Soil Survey for Cobb County determined that the soils within the approximately 5.2-acre project area include Urban land-Cecil complex and Urban land-Madison complex

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(Figure 4) (pg 105). The following table presents the hydric classification of the soils according to the Georgia Hydric Soils list (2007).

| Soil Series | Map Symbol | Map Unit Name | Hydric Soil Classification |
|-------------------------------|------------|--|-------------------------------|
| Urban land-Cecil complex | UfC | Urban land-Cecil complex, 2 to 10 percent slopes | Non-hydric |
| Urban land-Madison complex | UhC | Urban land-Madison complex, 2 to 10 percent slopes | Non-hydric |

During the field reconnaissance associated with the jurisdictional waters determination, MACTEC personnel identified potential jurisdictional areas within the subject property. An unnamed stream flows generally north to south-southwest along the central portion of the project site. A wetland is adjacent to the stream channel in a small alluvial fan (Figure 5) (pg 106).

Permitting Requirements

The USACE has jurisdiction over the streams and potential wetlands described previously. Nationwide Permit 39 (NWP 39) (Commercial and Institutional Development) may authorize impacts associated with the proposed commercial and institutional development. To qualify for NWP 39, permanent impacts to jurisdictional waters must not exceed 0.5 acre and permanent impacts to jurisdictional streambeds must not exceed 300 linear feet; although, the USACE District Engineer can waive these limits for intermittent and ephemeral streams. In addition, temporarily impacted areas must be restored to preconstruction contours and elevations.

If the proposed commercial and institutional development project has impacts to wetlands, perennial, intermittent, and ephemeral streams, then a Pre-Construction Notification (PCN) must be submitted to the USACE prior to any impacts for project construction. The project will have to be designed for compliance with NWP Terms and Conditions. A PCN should include the following information [33 CFR Part 330 Appendix A (C) (13) (b) (1-4)]:

- 1) Name, address, and telephone number of the prospective permittee;
- 2) Location of the proposed project;
- 3) Brief description of the proposed project including project purpose, direct and indirect adverse environmental effects caused by the proposed project, and identification of any other individual, nationwide, and/or regional permits intended to be used for the proposed project or any related activity;

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- 4) Delineation of special aquatic sites, including wetlands;
- 5) Conceptual mitigation plan; and
- 6) Surveyed jurisdictional waters and surveyed development plans also will need to be submitted as a component of the PCN, as well as drawings depicting project impacts to jurisdictional waters/wetlands.

Once a PCN is received and considered complete by the USACE, the USACE has 45 days to approve or deny the permit. A copy of NWP 39, the NWP General Conditions, and the USACE Savannah District Regional Conditions are attached.

If the proposed recreational facility project does not meet the conditions of the NWP, or if the USACE determines the impacts are more than minimal, then an individual permit (IP) application must be submitted to the USACE prior to any impacts. SAS Form 19 should be completed with the following information: 1) location of the proposed project; 2) name, address, and telephone number of the applicant's authorized agent for permit application coordination; 3) brief description of the proposed project including project purpose, direct and indirect adverse environmental effects caused by the proposed project, and identification of any other individual, nationwide, and/or regional permits intended to be used for the proposed project or any related activity; 4) delineation of special aquatic sites, including wetlands; 5) names and addresses of adjoining property owners whose property also adjoins the waterway; 6) conceptual mitigation plan; and 7) water quality certification. Surveyed jurisdictional waters and surveyed development plans also will need to be submitted as a component of the IP, as well as drawings depicting project impacts to jurisdictional waters/wetlands. Individual permits are issued following a full public interest review, including a public notice. After evaluating comments and information received, a final decision on the application is made. A permit typically will be granted unless the proposal is found to be contrary to the public interest. A USACE Individual Permit requires a minimum of six months for approval or denial (upon receipt of a completed permit application), and there is a 30-day public review period.

As mentioned previously, the State of Georgia restricts land-disturbing activities within 25 feet of the banks of State waters, as measured from the point where vegetation has been wrested by normal stream flow. EPD allows exceptions under certain circumstances, including roadways and utilities. As detailed in the City of Kennesaw buffer and setback requirements and vegetative buffers in the ordinance codified through April 2, 2007, there is a mandatory undisturbed vegetative buffer for a distance of 50 feet on both sides of perennial streams as measured from the stream banks. The Local Issuing Authority, the City of Kennesaw, will determine if a stream buffer variance from EPD is required for the proposed site development.

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Conclusions

MACTEC conducted a jurisdictional waters determination within the proposed property boundaries. MACTEC determined that jurisdictional waters are present within the proposed project property boundaries. It is recommended that the jurisdictional waters within the project area be delineated and then verified by the USACE. The jurisdictional waters delineation, USACE verification, and permitting, if necessary, should be completed prior to project construction. A Protected Species Assessment and Phase I Cultural Resources Assessment will be required as a part of the environmental permitting. MACTEC also recommends that the City of Kennesaw be contacted to determine if a state streambank buffer variance is required for the project.

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15.5 APPENDIX E- Summary of Downtown Intersection Traffic Counts

The following tables present intersection traffic counts taken to analyze traffic patterns and identify transportation-related concerns within the study area. This information has been used to create traffic pattern models which assisted in determining appropriate transportation design solutions for the study area. Nine intersections were identified as being associated to the study area. Eight of the intersections have a direct impact on the study area. Data for left turns, right turns and thru traffic counts was collected. The data was obtained during morning and afternoon peak travel periods between May 22, 2007 and May 24, 2007. The morning peak travel period data was collected from 7:00 AM to 8:45 AM. The afternoon peak travel period data was collected from 4:00 PM to 5:45 PM.

Table 25: Traffic Counts for the Intersection at North Main St. and Whitfield Pl.

| | No | rth Main S | t Northbo | ound | No | rth Main S | t Southb | ound | Whitfield Pl Westbound | | | | |
|------------|------|------------|-----------|-------|------|------------|----------|-------|------------------------|------|-------|-------|--|
| ** | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total | |
| AM Summary | 0 | 735 | 0 | 735 | 0 | 1542 | 0 | 1542 | 173 | 0 | 100 | 273 | |
| PM Summary | 813 | 827 | 0 | 1640 | 0 | 1024 | 0 | 1024 | 14 | 0 | 253 | 267 | |
| Totals | 813 | 1562 | 0 | 2375 | 0 | 2566 | 0 | 2566 | 187 | 0 | 353 | 540 | |

Source: MACTEC Engineering and Consulting. Traffic Counts Performed by Traffic Data Services, LLC.

Table 26: Traffic Counts for the Intersection of North Main St. and Moon Station Rd.

| | North | n Main St | Northbo | ound | Noi | th Main S | t Southb | ound | Moo | n Station | Rd Westl | oound |
|------------|-------|-----------|---------|-------|------|-----------|----------|-------|------|-----------|----------|-------|
| Time | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total |
| AM Summary | 572 | 222 | 0 | 794 | 156 | 1702 | 2 | 1860 | 370 | 0 | 13 | 383 |
| PM Summary | 1749 | 337 | 0 | 2086 | 143 | 1015 | 3 | 1161 | 264 | 0 | 14 | 278 |
| Totals | 2321 | 559 | 0 | 2880 | 299 | 2717 | 5 | 3021 | 634 | 0 | 27 | 661 |

Source: MACTEC Engineering and Consulting. Traffic Counts Performed by Traffic Data Services, LLC.

Table 27: Traffic Counts for the Intersection of North Main St. and Lewis St.

| | No | rth Main S | t Northbo | ound | Nor | th Main S | Southb | ound | | Lewis St. | Eastboun | d |
|------------|------|------------|-----------|-------|------|-----------|--------|-------|------|-----------|----------|-------|
| Time | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total |
| AM Summary | 18 | 747 | 0 | 765 | 0 | 2025 | 14 | 2039 | 15 | 0 | 26 | 41 |
| PM Summary | 39 | 2115 | 0 | 2154 | 0 | 1290 | 19 | 1309 | 15 | 0 | 50 | 65 |
| Totals | 57 | 2862 | 0 | 2919 | 0 | 3315 | 33 | 3348 | 30 | 0 | 76 | 106 |

Source: MACTEC Engineering and Consulting. Traffic Counts Performed by Traffic Data Services, LLC.

Table 28: Traffic Counts for the Intersection of North Main St., JO Stephenson Ave., and Cherokee St.

| | North | Main S | t Northi | oound | North | Main St | South | bound | JO St | ephenso: | n Ave- Ed | stbound | Che | rokee S | t Westb | ound |
|------------|-------|--------|----------|-------|-------|---------|-------|-------|-------|----------|-----------|---------|------|---------|---------|-------|
| Time | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total |
| AM Summary | 15 | 522 | 109 | 646 | 554 | 1450 | 17 | 2021 | 21 | 372 | 17 | 410 | 148 | 146 | 215 | 509 |
| PM Summary | 37 | 1537 | 93 | 1667 | 324 | 1040 | 25 | 1389 | 30 | 159 | 35 | 224 | 266 | 263 | 587 | 1116 |
| Totals | 52 | 2059 | 202 | 2313 | 878 | 2490 | 42 | 3410 | 51 | 531 | 52 | 634 | 414 | 409 | 802 | 1625 |

Source: MACTEC Engineering and Consulting. Traffic Counts Performed by Traffic Data Services, LLC.

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Table 29: Traffic Counts for the Intersection of South Main St., and Watts Dr.

| | Sou | uth Main S | t Northb | ound | Sou | th Main S | t Southb | ound | | Watts Dr | Eastbour | ıd |
|------------|------|------------|----------|-------|------|-----------|----------|-------|------|----------|----------|-------|
| Time | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total |
| AM Summary | 122 | 591 | 3 | 716 | 2 | 1578 | 20 | 1600 | 46 | 0 | 345 | 391 |
| PM Summary | 508 | 1584 | 8 | 2100 | 3 | 1331 | 39 | 1373 | 20 | 0 | 256 | 276 |
| Totals | 630 | 2175 | 11 | 2816 | 5 | 2909 | 59 | 2973 | 66 | 0 | 601 | 667 |

Source: MACTEC Engineering and Consulting. Traffic Counts Performed by Traffic Data Services, LLC.

Table 30: Traffic Counts for the Interscetion of South Main Street and Summers St.

| | South | Main St | Eastbound | d | South | Main St | Westboun | d | Summers St Northbound | | | | |
|------------|-------|---------|-----------|-------|-------|---------|----------|-------|-----------------------|------|-------|-------|--|
| Time | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total | |
| AM Summary | 2 | 1795 | 363 | 2160 | 291 | 759 | 3 | 1053 | 262 | 0 | 246 | 508 | |
| PM Summary | 5 | 771 | 280 | 1056 | 336 | 1961 | 4 | 2301 | 259 | 0 | 236 | 495 | |
| Totals | 7 | 2566 | 643 | 3216 | 627 | 2720 | 7 | 3354 | 521 | 0 | 482 | 1003 | |

Source: MACTEC Engineering and Consulting. Traffic Counts Performed by Traffic Data Services, LLC.

Table 31: Traffic Counts for the Intersection of South Main St. and Sardis St.

| | So | uth Main | St Eastbo | ound | So | uth Main S | St Westbo | ound | Sardis St Southbound | | | |
|------------|------|----------|-----------|-------|------|------------|-----------|-------|----------------------|------|-------|-------|
| Time | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total |
| AM Summary | 162 | 1863 | 1 | 2026 | 0 | 810 | 138 | 948 | 418 | 0 | 199 | 617 |
| PM Summary | 189 | 779 | 3 | 971 | 0 | 1799 | 204 | 2003 | 149 | 0 | 591 | 740 |
| Totals | 351 | 2642 | 4 | 2997 | 0 | 2609 | 342 | 2951 | 567 | 0 | 790 | 1357 |

Source: MACTEC Engineering and Consulting. Traffic Counts Performed by Traffic Data Services, LLC.

Table 32: Traffic Counts for the Intersection of Big Shanty Rd and Sardis St.

| | Biç | Shanty | Rd EastBo | ound | Biç | Shanty F | Rd WestB | ound | Sardis St Northbound | | | | |
|------------|------|--------|-----------|-------|------|----------|----------|-------|----------------------|------|-------|-------|--|
| Time | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total | |
| AM Summary | 0 | 403 | 491 | 894 | 118 | 70 | 0 | 188 | 203 | 55 | 48 | 306 | |
| PM Summary | 0 | 79 | 241 | 320 | 477 | 96 | 0 | 573 | 353 | 0 | 59 | 412 | |
| Totals | 0 | 482 | 732 | 1214 | 595 | 166 | 0 | 761 | 556 | 55 | 107 | 718 | |

Source: MACTEC Engineering and Consulting. Traffic Counts Performed by Traffic Data Services, LLC.

Table 33: Traffic Counts for the Intersection of Big Shanty Rd., Shirley Dr. and Cherokee St.

| | Big S | hanty R | d North | bound | Shir | ey Dr. | - Southb | ound | Che | rokee S | t Eastb | ound | Che | rokee S | t Westb | ound |
|------------|-------|---------|---------|-------|------|--------|----------|-------|------|---------|---------|-------|------|---------|---------|-------|
| Time | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total |
| AM Summary | 17 | 18 | 203 | 221 | 3 | 4 | 13 | 20 | 13 | 571 | 409 | 993 | 489 | 494 | 3 | 986 |
| PM Summary | 45 | 20 | 393 | 458 | 3 | 3 | 34 | 40 | 21 | 477 | 95 | 593 | 212 | 1043 | 5 | 1260 |
| Totals | 62 | 38 | 596 | 679 | 6 | 7 | 47 | 60 | 34 | 1048 | 504 | 1586 | 701 | 1537 | 8 | 2246 |

Source: MACTEC Engineering and Consulting. Traffic Counts Performed by Traffic Data Services, LLC.

As of 03/12/2008

15.6 APPENDIX F- Master Implementation Schedule

Table 34: Detailed Summary of the Master Implementation Schedule Source: MACTEC Engineering and Consulting

As of 03/12/2008

Table 35: Graphic Summary of the Implementation Schedule Source: MACTEC Engineering and Consulting

As of 03/12/2008

15.7 APPENDIX G- Source References

Planning

- City of Kennesaw Comprehensive Plan, 2007-2027
- Livable Centers Initiative Study, 2003
- City of Kennesaw Parks, Recreation and Open Space Master Plan, 2004
- Kennesaw Downtown Master Plan, 1998

Transportation

- Cobb County Comprehensive Transportation Plan, 2007-2027
- Downtown Kennesaw Parking Study, June 2006
- Kennesaw City-Wide Traffic Study, August 1999
- <u>Roundabouts: An Informational Guide.</u> U.S. Department of Transportation, Federal Highway Administration. Publication No. FHWA-RD-00-0067. June 2000.
- Georgia Department of Transportation website. http://www.dot.state.ga.us/

Other

- City of Kennesaw Code of Ordinances
 - Historic Design Review Guidelines, Revised February 5, 2007
 - Tree Ordinance, Revised August 6, 2007
 - Zoning District Regulations
- City of Kennesaw Design Standards, 2007 (Not adopted)

As of 03/12/2008

15.8 APPENDIX H- Record of Stakeholder Meetings

The following table lists the meetings in which information was gathered from or conveyed to the Library committee, the Steering Committee, the steering sub-committee or selected residents.

Table 36: Stakeholder Meetings

| Date | Time | Committee | Meeting Location |
|---------------------|---------------------|---------------------------------------|---|
| 04/18/07 | lpm | Library Committee | Kennesaw City Hall- Community Development Conf Rm |
| 06/06/07 | 12pm-2pm | Steering Committee | Kennesaw City Hall- First Floor Conf Rm |
| 06/13/07 | 11am-12pm | Parks and Recreation Staff | Kennesaw City Hall- Community Development Conf Rm |
| 06/22/07 | 1pm-2pm | Ms. Linda Lewis and Darryl Simmons | Ms. Lewis' Place of Business |
| 07/09/07 | 1pm-3pm | Steering Sub Committee | Kennesaw City Hall- Community Development Conf Rm |
| 07/12/07 | 1pm-2pm | Steering Committee | Kennesaw City Hall- First Floor Conf Rm |
| 08/16/07 | 10:30am- 11:30am | Steering Sub Committee | Kennesaw City Hall- First Floor Conf Rm |
| 09/07/07 | 3:30-4:30pm | Steering Sub Committee | Kennesaw City Hall- Community Development Conf Rm |
| 09/12/07 | 3:30-5:00pm | Steering Committee | Kennesaw City Hall- First Floor Conf Rm |
| 09/12/07 | 6pm | Mayor and Council | Kennesaw City Hall- First Floor Conf Rm |
| 09/26/07 | 1pm-2pm | Public Works | Public Works Building Conference Room |
| 10/4/07 | 10am-11:30am | Steering Sub Committee | Kennesaw City Hall- Community Development Conf Rm |
| 10/11/07 | 2pm-3pm | Mr. Harper Harris | Museum |
| 12/11/07 | 12:30pm-2pm | Steering Committee | Kennesaw City Hall- First Floor Conf Rm |
| 01/15/08 | 9:15am- 10:15am | Council Members | Bob Fox's office |
| 03/19/08 | 3:00-5:00pm | Steering Committee | Kennesaw City Hall- First Floor Training Rm |
| Pending 03/27/08 | 6:30-8:30pm | HPC, KDDA, Planning Commission | |
| Pending 04/07/08 | 6:30pm | Mayor and Council | Council Chambers |
| | | | |